

Analytical Data Package Prepared For

Fluor Hanford

Radiochemical Analysis By

TestAmerica TARL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains _____ Pages

Report Nbr: 39536

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05419 ✓	I08-038	B1V6L4	J8E230328-1	KNTWQ1AA	9KNTWQ10	8164618
		B1V6L0	J8E230328-2	KNTW61AA	9KNTW610	8164618
	W08-005	B1V845	J8E280293-1	KN1HA1AA	9KN1HA10	8164618
	I08-038	B1V6B1	J8E280295-1	KN1HP1AA	9KN1HP10	8164618
		B1V6B2	J8E280295-2	KN1HQ1AA	9KN1HQ10	8164618
	I08-037	B1V9W2	J8E280299-1	KN1JT1AA	9KN1JT10	8164622
		B1V9W2	J8E280299-1	KN1JT1AC	9KN1JT10	8164624
		B1V9W2	J8E280299-1	KN1JT1AD	9KN1JT10	8164617
		B1V9W2	J8E280299-1	KN1JT1AE	9KN1JT10	8164618
		B1V9W2	J8E280299-1	KN1JT1AF	9KN1JT10	8164621
		B1V9W2	J8E280299-1	KN1JT1AG	9KN1JT10	8164623
		B1V9W3	J8E280299-2	KN1JX1AA	9KN1JX10	8164622
		B1V9W3	J8E280299-2	KN1JX1AC	9KN1JX10	8164624
		B1V9W3	J8E280299-2	KN1JX1AD	9KN1JX10	8164617
		B1V9W3	J8E280299-2	KN1JX1AE	9KN1JX10	8164618

Comments:

RECEIVED JULY 21, 2008

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Report Nbr: 39536

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05419	I08-037	B1V9W3	J8E280299-2	KN1JX1AF	9KN1JX10	8164621
		B1V9W3	J8E280299-2	KN1JX1AG	9KN1JX10	8164623
		B1V680	J8E280299-3	KN1KG1AA	9KN1KG10	8164618
		B1V679	J8E280299-4	KN1KP1AA	9KN1KP10	8164618
		B1V687	J8E280299-5	KN1KX1AA	9KN1KX10	8164618
	I08-036	B1V608	J8E290299-1	KN3T71AA	9KN3T710	8151262
	I08-035	B1V5L1	J8F020174-1	KN78H1AA	9KN78H10	8154426
	I08-039	B1V6Y4	J8F030292-1	KPAJ71AA	9KPAJ710	8155303
	I08-038	B1V6F5	J8F040162-1	KPA601AA	9KPA6010	8164618
		B1V6F6	J8F040162-2	KPA641AA	9KPA6410	8164618
		B1V829	J8F040165-1	KPA7M1AA	9KPA7M10	8164618
	I08-035	B1V5J7	J8F040186-1	KPCC51AA	9KPCC510	8155303
	S08-003	B1TKC2	J8F050162-1	KPEVW1AA	9KPEVW10	8164615
		B1TKC2	J8F050162-1	KPEVW1AC	9KPEVW10	8164616
		B1TKC2	J8F050162-1	KPEVW1AD	9KPEVW10	8164620
	I08-037	B1V9T9	J8F050164-1	KPEV31AA	9KPEV310	8164622
		B1V9T9	J8F050164-1	KPEV31AC	9KPEV310	8164624
		B1V9T9	J8F050164-1	KPEV31AD	9KPEV310	8164617
		B1V9T9	J8F050164-1	KPEV31AE	9KPEV310	8164618
		B1V9T9	J8F050164-1	KPEV31AG	9KPEV310	8164623
		B1V9T9	J8F050164-1	KPEV32AF	9KPEV320	8192442
		B1RTP0	J8F050177-1	KPEX61AA	9KPEX610	8164615
		B1RTP0	J8F050177-1	KPEX61AC	9KPEX610	8164616
	S08-001	B1RTP0	J8F050177-1	KPEX61AD	9KPEX610	8164617
		B1RTP0	J8F050177-1	KPEX61AE	9KPEX610	8164618
		B1RTP0	J8F050177-1	KPEX61AF	9KPEX610	8164619
		B1RTP0	J8F050177-1	KPEX61AF	9KPEX610	8164619

Comments:

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

July 21, 2008

Attention: Steve Trent

SAF Number	:	I08-038, W08-005, I08-038, I08-037, I08-036, I08-035, I08-039, S08-003, S08-001
Date SDG Closed	:	June 4, 2008
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05419
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between May 23, 2008 and June 4, 2008 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>DATE OF RECEIPT</u>	<u>MATRIX</u>
B1V6L4	KNTWQ	5/23/08	WATER
B1V6L0	KNTW6	5/23/08	WATER
B1V845	KN1HA	5/28/08	WATER
B1V6B1	KN1HP	5/28/08	WATER
B1V6B2	KN1HQ	5/28/08	WATER
B1V9W2	KN1JT	5/28/08	WATER
B1V9W3	KN1JX	5/28/08	WATER
B1V680	KN1KG	5/28/08	WATER
B1V679	KN1KP	5/28/08	WATER
B1V687	KN1KX	5/28/08	WATER
B1V608	KN3T7	5/29/08	WATER
B1V5L1	KN78H	6/02/08	WATER
B1V6Y4	KPAJ7	6/03/08	WATER

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B1V6F5	KPA60	6/03/08	WATER
B1V6F6	KPA64	6/03/08	WATER
B1V829	KPA7M	6/03/08	WATER
B1V5J7	KPCC5	6/03/08	WATER
B1TKC2	KPEVW	6/04/08	WATER
B1V9T9	KPEV3	6/04/08	WATER
B1RTP0	KPEX6	6/04/08	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy

Uranium 234, 235 and 238 by method RICH-RC-5039

Neptunium-237 by method RICH-RC-5009

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014

Gross Beta by method RICH-RC-5014

Strontium-90 by method RICH-RC-5006

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017

Iodine-129 (LL) by method RICH-RC-5025

Liquid Scintillation Counting

Selenium-79 by method RICH-RC-5043

Carbon-14 by method RICH-RC-5022

Laser Induced Phosphorimetry

Total Uranium by method RICH-RC-5058

Chemical Analysis

Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Uranium 234, 235 and 238 by method RICH-RC-5039:

The LCS, batch blank, sample and sample duplicate (B1V9W2) results are within contractual requirements.

Neptunium-237 by method RICH-RC-5009:

The LCS, batch blank, sample and sample duplicate (B1V9W3) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

Samples B1TKC2, B1RTP0 and B1TKC2 DUP were analyzed with reduce aliquots based on weight screens. Except as noted, the LCS, batch blank, samples and sample duplicate (B1TKC2) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

The LCS, batch blank, samples and sample duplicate (B1RTP0) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1RTP0) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:

The LCS, batch blank, samples and sample duplicate (B1V9T9) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:

The LCS, batch blank, samples and sample duplicate (B1V6L4) results are within contractual requirements.

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Liquid Scintillation Counting

Selenium-79 by method RICH-RC-5043:

Sample B1V9T9 had a low tracer yield and the CRDL was not met on the first analysis. Sample B1V9T9 was reanalyzed with acceptable results.

There is no LCS for selenium-79. Except as noted, the batch blank, samples and sample duplicate (B1V9W2) results are within contractual requirements.

Carbon-14 by method RICH-RC-5022:

The LCS, batch blank, samples and sample duplicate (B1V9W3) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1TKC2), and sample matrix spike (B1TKC2) results are within contractual requirements.

Chemical Analysis

Hexavalent Chromium by EPA method 7196A

Batch 8151262

The LCS, batch blank, samples, sample duplicate (B1V608), sample matrix spike (B1V608), and matrix spike duplicate (B1V608) results are within contractual requirements.

Batch 8154426

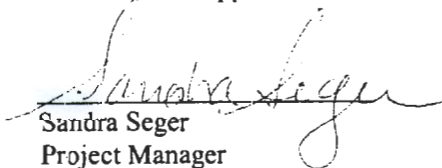
The LCS, batch blank, samples, sample duplicate (B1V5L1), sample matrix spike (B1V5L1), and matrix spike duplicate (B1V5L1) results are within contractual requirements.

Batch 8155503

The LCS, batch blank, samples, sample duplicate (B1V6Y4), sample matrix spike (B1V6Y4), and matrix spike duplicate (B1V6Y4) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:


Sandra Seger
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	TestAmerica Richland's SOP No.
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 00-02	Gross Alpha (Coprecipitation)	RICH-RC-5021
EPA 903.0	Total Alpha Radium (Ra-226)	RICH-RC-5027
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr-89/90	RICH-RC-5006
ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007

Results in this report relate only to the sample(s) analyzed.

Uncertainty Estimation

TestAmerica Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x, y, z, \dots)$. The components (x, y, z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1, 2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation $(\text{Result}/\text{Expected}) - 1$ as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) u_c - Combined Uncertainty.	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, u_c the combined uncertainty. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = (1.645 * \sqrt{2 * (\text{BkgndCnt}/\text{BkgndCntMin}) / \text{SCntMin}}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{((\text{BkgndCnt}/\text{BkgndCntMin}) / \text{SCntMin}) + 2.71 / \text{SCntMin}}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S - D) / [\sqrt{(\text{TPUs}^2 + \text{TPUd}^2)}]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

7/21/2008 9:40:57 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

Version: 05

Rpt Nbr: 39536

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KN1HA10	B1V845		MW6-SBB-A1	W08-005	W05419					05/27/2008 14:01				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	1.73E-01	pCi/L	1.6E-01	1.6E-01	U	3.28E-01	91.4	I129LL_SEP_LEPS	3.8937E+00	L	07/02/2008 18:16	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KN1HP10	B1V6B1		MW6-SBB-A1	I08-038	W05419					05/27/2008 12:10				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	1.17E-01	pCi/L	1.6E-01	1.6E-01	U	3.14E-01	91.9	I129LL_SEP_LEPS	3.7568E+00	L	07/02/2008 18:18	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KN1HQ10	B1V6B2		MW6-SBB-A1	I08-038	W05419					05/27/2008 12:10				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	2.16E-01	pCi/L	1.6E-01	1.6E-01	U	3.34E-01	93.2	I129LL_SEP_LEPS	3.7843E+00	L	07/02/2008 18:18	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KN1JT10	B1V9W2		MW6-SBB-A1	I08-037	W05419					05/27/2008 09:57				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164624	C-14	14762-75-5	5.32E+00	pCi/L	3.6E+00	4.3E+00	U	8.18E+00	100.0	C14_LSC	2.00E-01	L	06/23/2008 22:15	I
8164617	BE-7	13966-02-4	-1.94E+00	pCi/L	1.6E+01	1.6E+01	U	2.82E+01		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	CO-60	10198-40-0	8.96E-02	pCi/L	1.2E+00	1.2E+00	U	2.35E+00		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	CS-134	13967-70-9	4.47E-01	pCi/L	1.6E+00	1.6E+00	U	2.99E+00		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	CS-137	10045-97-3	-8.00E-01	pCi/L	1.6E+00	1.6E+00	U	2.78E+00		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	EU-152	14683-23-9	-1.31E-01	pCi/L	4.1E+00	4.1E+00	U	7.01E+00		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	EU-154	15585-10-1	6.28E-01	pCi/L	4.0E+00	4.0E+00	U	7.81E+00		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	EU-155	14391-16-3	-2.96E-01	pCi/L	3.1E+00	3.1E+00	U	5.37E+00		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	K-40	13966-00-2	1.28E+01	pCi/L	3.4E+01	3.4E+01	U	3.05E+01		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	RU-106	13967-48-1	-5.62E+00	pCi/L	1.3E+01	1.3E+01	U	2.17E+01		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164617	SB-125	14234-35-6	7.77E-01	pCi/L	4.2E+00	4.2E+00	U	7.48E+00		GAMMALL_GS	2.00E+00	L	06/20/2008 07:42	I
8164618	I-129L	15046-84-1	5.52E-01	pCi/L	3.2E-01	3.2E-01	U	4.14E-01	91.4	I129LL_SEP_LEPS	3.8579E+00	L	07/02/2008 20:01	I
8164622	NP-237	13994-20-2	4.16E-02	pCi/L	8.5E-02	8.5E-02	U	1.99E-01	88.4	NP237_LLE_PLAT	2.00E-01	L	06/26/2008 20:06	I
8164621	Se-79	15758-45-9	1.66E+00	pCi/L	4.7E+00	9.3E+00	U	1.12E+01	81.2	SE79_SEP_IE_LS	2.00E-01	L	07/03/2008 18:15	I
8164623	U-234	13966-29-5	1.19E+00	pCi/L	3.8E-01	4.2E-01		1.42E-01	99.3	UIISO_PLATE_AEA	2.0001E-01	L	06/20/2008 15:03	I

TestAmerica

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/21/2008 9:40:57 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

Version: 05

Rpt Nbr: 39536

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

8164623	U-235	15117-96-1	-1.19E-02	pCi/L	6.2E-02	6.2E-02	U	1.68E-01	99.3	UIISO_PLATE_AEA	2.0001E-01	L	06/20/2008	15:03	I
8164623	U-238	U-238	7.55E-01	pCi/L	3.0E-01	3.3E-01		1.88E-01	99.3	UIISO_PLATE_AEA	2.0001E-01	L	06/20/2008	15:03	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:					
9KN1JX10	B1V9W3		MW6-SBB-A1	I08-037	W05419					05/27/2008 11:13					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act	
8164624	C-14	14762-75-5	-1.46E+00	pCi/L	3.3E+00	4.0E+00	U	8.18E+00	100.0	C14_LSC	2.00E-01	L	06/23/2008 22:57	I	
8164617	BE-7	13966-02-4	-6.66E+00	pCi/L	1.6E+01	1.6E+01	U	2.62E+01		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	CO-60	10198-40-0	-4.30E-01	pCi/L	1.8E+00	1.8E+00	U	3.26E+00		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	CS-134	13967-70-9	-6.93E-01	pCi/L	1.8E+00	1.8E+00	U	3.09E+00		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	CS-137	10045-97-3	9.42E-01	pCi/L	1.9E+00	1.9E+00	U	3.47E+00		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	EU-152	14683-23-9	2.62E+00	pCi/L	4.4E+00	4.4E+00	U	8.11E+00		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	EU-154	15585-10-1	-2.09E+00	pCi/L	5.1E+00	5.1E+00	U	8.86E+00		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	EU-155	14391-16-3	-2.63E+00	pCi/L	2.9E+00	2.9E+00	U	4.67E+00		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	K-40	13966-00-2	-2.17E+01	pCi/L	4.2E+01	4.2E+01	U	8.20E+01		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	RU-106	13967-48-1	-7.78E+00	pCi/L	1.4E+01	1.4E+01	U	2.36E+01		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164617	SB-125	14234-35-6	-9.66E-02	pCi/L	3.9E+00	3.9E+00	U	6.88E+00		GAMMALL_GS	2.0001E+00	L	06/20/2008 07:42	I	
8164618	I-129L	15046-84-1	-6.73E-04	pCi/L	1.4E-01	1.4E-01	U	2.62E-01	93.8	I129LL_SEP_LEPS	3.8846E+00	L	07/02/2008 20:03	I	
8164622	NP-237	13994-20-2	0.00E+00	pCi/L	7.1E-02	7.1E-02	U	1.66E-01	90.1	NP237_LLE_PLAT	2.00E-01	L	06/26/2008 20:06	I	
8164621	Se-79	15758-45-9	-1.14E+00	pCi/L	4.5E+00	8.8E+00	U	1.09E+01	83.5	SE79_SEP_IE_LS	1.999E-01	L	07/03/2008 20:00	I	
8164623	U-234	13966-29-5	1.04E+00	pCi/L	3.6E-01	4.0E-01		2.34E-01	100.2	UIISO_PLATE_AEA	2.0003E-01	L	06/20/2008 15:03	I	
8164623	U-235	15117-96-1	6.59E-02	pCi/L	1.1E-01	1.1E-01	U	2.06E-01	100.2	UIISO_PLATE_AEA	2.0003E-01	L	06/20/2008 15:03	I	
8164623	U-238	U-238	5.45E-01	pCi/L	2.7E-01	2.8E-01		2.68E-01	100.2	UIISO_PLATE_AEA	2.0003E-01	L	06/20/2008 15:03	I	

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KN1KG10	B1V680		MW6-SBB-A1	I08-037	W05419					05/27/2008 13:18				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	3.14E-02	pCi/L	1.2E-01	1.2E-01	U	2.36E-01	91.9	I129LL_SEP_LEPS	3.8818E+00	L	07/02/2008 20:03	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KN1KP10	B1V679		MW6-SBB-A1	I08-037	W05419					05/27/2008 13:18				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	4.55E+00	pCi/L	7.1E-01	7.1E-01		3.31E-01	91.1	I129LL_SEP_LEPS	3.8927E+00	L	07/02/2008 21:56	I

TestAmerica

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/21/2008 9:40:57 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

Version: 05

Rpt Nbr: 39536

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KN1KX10	B1V687		MW6-SBB-A1	I08-037	W05419					05/27/2008 14:40				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	-5.14E-02	pCi/L	1.4E-01	1.4E-01	U	2.40E-01	94.9	I129LL_SEP_LEPS	3.8816E+00	L	07/02/2008 21:58	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KNTW610	B1V6L0		MW6-SBB-A1	I08-038	W05419					05/20/2008 12:50				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	-1.75E-02	pCi/L	1.5E-01	1.5E-01	U	2.68E-01	92.2	I129LL_SEP_LEPS	3.8526E+00	L	07/02/2008 16:27	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KNTWQ10	B1V6L4		MW6-SBB-A1	I08-038	W05419					05/20/2008 13:22				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	1.55E-01	pCi/L	1.5E-01	1.5E-01	U	3.05E-01	99.5	I129LL_SEP_LEPS	3.8645E+00	L	07/02/2008 16:27	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPA6010	B1V6F5		MW6-SBB-A1	I08-038	W05419					06/02/2008 09:49				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	9.78E-02	pCi/L	1.1E-01	1.1E-01	U	2.32E-01	95.7	I129LL_SEP_LEPS	3.901E+00	L	07/02/2008 21:58	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPA6410	B1V6F6		MW6-SBB-A1	I08-038	W05419					06/02/2008 08:00				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	-4.94E-02	pCi/L	1.5E-01	1.5E-01	U	2.71E-01	94.3	I129LL_SEP_LEPS	3.868E+00	L	07/03/2008 05:11	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPA7M10	B1V829		MW6-SBB-A1	W08-005	W05419					06/03/2008 12:56				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164618	I-129L	15046-84-1	4.90E-01	pCi/L	2.9E-01	2.9E-01	U	3.66E-01	93.2	I129LL_SEP_LEPS	3.9115E+00	L	07/03/2008 05:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPEV310	B1V9T9		MW6-SBB-A1	I08-037	W05419					06/04/2008 09:30				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164624	C-14	14762-75-5	2.92E+00	pCi/L	3.5E+00	4.2E+00	U	8.18E+00	100.0	C14_LSC	2.00E-01	L	06/24/2008 00:23	I

TestAmerica

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/21/2008 9:40:57 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 39536 File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

8164617	BE-7	13966-02-4	7.60E+00	pCi/L	9.0E+00	9.0E+00	U	1.72E+01	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	CO-60	10198-40-0	7.65E-01	pCi/L	1.3E+00	1.3E+00	U	2.57E+00	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	CS-134	13967-70-9	-9.17E-02	pCi/L	1.2E+00	1.2E+00	U	2.11E+00	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	CS-137	10045-97-3	1.60E-02	pCi/L	1.1E+00	1.1E+00	U	1.92E+00	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	EU-152	14683-23-9	-4.15E-01	pCi/L	2.6E+00	2.6E+00	U	4.56E+00	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	EU-154	15585-10-1	3.10E-01	pCi/L	3.2E+00	3.2E+00	U	6.03E+00	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	EU-155	14391-16-3	1.21E+00	pCi/L	2.5E+00	2.5E+00	U	4.59E+00	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	K-40	13966-00-2	-1.17E+01	pCi/L	2.5E+01	2.5E+01	U	4.86E+01	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	RU-106	13967-48-1	4.23E+00	pCi/L	9.9E+00	9.9E+00	U	1.85E+01	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164617	SB-125	14234-35-6	-9.73E-01	pCi/L	2.6E+00	2.6E+00	U	4.51E+00	GAMMALL_GS	1.951E+00	L	06/20/2008 07:43	I
8164618	I-129L	15046-84-1	3.19E-01	pCi/L	1.9E-01	1.9E-01	U	3.92E-01	I129LL_SEP_LEPS	3.8632E+00	L	07/03/2008 05:13	I
8164622	NP-237	13994-20-2	0.00E+00	pCi/L	8.7E-02	8.7E-02	U	2.04E-01	NP237_LLE_PLAT	2.002E-01	L	06/26/2008 20:07	I
8164623	U-234	13966-29-5	7.48E-01	pCi/L	3.1E-01	3.4E-01		2.78E-01	UIISO_PLATE_AEA	2.0003E-01	L	06/20/2008 15:03	I
8164623	U-235	15117-96-1	1.14E-01	pCi/L	1.2E-01	1.2E-01	U	1.43E-01	UIISO_PLATE_AEA	2.0003E-01	L	06/20/2008 15:03	I
8164623	U-238	U-238	4.01E-01	pCi/L	2.2E-01	2.3E-01		1.89E-01	UIISO_PLATE_AEA	2.0003E-01	L	06/20/2008 15:03	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:
9KPEV320	B1V9T9		MW6-SBB-A1	I08-037	W05419					06/04/2008 09:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8192442	Se-79	15758-45-9	-3.14E+00	pCi/L	4.7E+00	9.1E+00	U	1.18E+01	75.2	SE79_SEP_IE_LS	2.00E-01	L	07/17/2008 01:06	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:
9KPEVW10	B1TKC2		MW6-SBB-A1	S08-003	W05419					06/04/2008 13:19

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164615	ALPHA	12587-46-1	5.93E+00	pCi/L	1.8E+00	2.3E+00		1.70E+00	100.0	9310_ALPHABETA	1.429E-01	L	06/26/2008 15:16	I
8164616	BETA	12587-47-2	1.43E+01	pCi/L	2.2E+00	3.0E+00		2.89E+00	100.0	9310_ALPHABETA	2.001E-01	L	06/26/2008 19:08	I
8164620	Uranium	7440-61-1	1.23E+01	ug/L	1.4E+00	1.4E+00		8.35E-02		UTOT_KPA	2.51E-02	ML	07/15/2008 15:39	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:
9KPEX610	B1RTP0		MW6-SBB-A1	S08-001	W05419					06/04/2008 11:17

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8164615	ALPHA	12587-46-1	5.79E-01	pCi/L	7.6E-01	7.6E-01	U	1.33E+00	100.0	9310_ALPHABETA	1.668E-01	L	06/26/2008 14:51	I
8164616	BETA	12587-47-2	5.67E+00	pCi/L	1.7E+00	1.8E+00		2.91E+00	100.0	9310_ALPHABETA	2.003E-01	L	06/26/2008 19:08	I

TestAmerica

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/21/2008 9:40:57 AM

TestAmerica Report

Lab Code: TARL

FormNbr:	R	FormatType:	FEAD	Version:	05	Rpt Nbr:	39536	File Name:	h:\Reportdb\edd\Fead\Rad\W05419.Edd, h:\Reportdb\edd\Fead\Rad\39536.Edd					
8164617	BE-7	13966-02-4	2.04E+00	pCi/L	1.4E+01	1.4E+01	U	2.60E+01	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	CO-60	10198-40-0	-1.08E+00	pCi/L	1.6E+00	1.6E+00	U	2.73E+00	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	CS-134	13967-70-9	2.01E-01	pCi/L	1.6E+00	1.6E+00	U	2.95E+00	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	CS-137	10045-97-3	-1.82E-01	pCi/L	1.5E+00	1.5E+00	U	2.69E+00	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	EU-152	14683-23-9	-8.23E-01	pCi/L	3.9E+00	3.9E+00	U	6.71E+00	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	EU-154	15585-10-1	-3.30E+00	pCi/L	4.5E+00	4.5E+00	U	7.33E+00	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	EU-155	14391-16-3	-2.18E+00	pCi/L	3.2E+00	3.2E+00	U	5.07E+00	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	K-40	13966-00-2	4.03E+01	pCi/L	3.7E+01	3.7E+01		2.66E+01	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	RU-106	13967-48-1	-7.01E-01	pCi/L	1.3E+01	1.3E+01	U	2.39E+01	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164617	SB-125	14234-35-6	2.13E+00	pCi/L	3.9E+00	3.9E+00	U	7.31E+00	GAMMALL_GS	2.0009E+00	L	06/20/2008	07:44	I
8164618	I-129L	15046-84-1	3.12E-01	pCi/L	1.5E-01	1.5E-01	U	3.34E-01	93.8 I129LL_SEP_LEPS	3.8938E+00	L	07/03/2008	06:57	I
8164619	SR-90	10098-97-2	3.21E-01	pCi/L	3.1E-01	3.3E-01	U	6.72E-01	84.2 SRISO_SEP_PRE	1.0001E+00	L	07/03/2008	05:39	I

TestAmerica

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd

Lab Sample Id: KPVM01AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 11:17

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BC	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164619	SR-90	4.16E-02	pCi/L	2.1E-01	U	4.47E-01	87.4		SRISO_SEP_P	1.0007E+00	07/03/2008				D
BLK	10098-97-2			2.1E-01						L	05:39				

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KPVM11AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 13:19

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BE	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164620 BLK	Uranium 7440-61-1	0.00E+00	ug/L	0.0E+00 0.0E+00	U	8.35E-02			UTOT_KPA	2.51E-02 ML	07/15/2008 15:23				D

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\Fead\VRad\W05419.Edd, h:\Reportdb\eddd\Fead\VRad\39536.Edd

Lab Sample Id: KPVM21AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 09:57

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 05/28/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164621	Se-79	-2.57E+00	pCi/L	8.5E+00	U	1.07E+01	85.2		SE79_SEP_IE	2.002E-01	07/03/2008				D
BLK	15758-45-9			4.3E+00						L	21:46				

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\ledd\Fead\I\Rad\W05419.Edd, h:\Reportdb\ledd\Fead\I\Rad\39536.Edd

Lab Sample Id: KPVM31AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 11:13

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 05/28/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BI		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8164622	NP-237	0.00E+00	pCi/L	7.4E-02	U	1.73E-01	86.6		NP237_LLE_P	2.001E-01	06/26/2008										
BLK	13994-20-2			7.4E-02						L	20:07				D						

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KPVM41AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 09:57

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 05/28/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr		Suffix	Decant	Distilled Volume		File Id		FSuffix	RTyp
		MW6-SBB-A19981												BK	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164623	U-234	-5.72E-03	pCi/L	6.4E-02	U	2.23E-01	95.4		UIISO_PLATE_	2.0004E-01	06/20/2008				D
BLK	13966-29-5			6.4E-02						L	15:04				
8164623	U-235	-1.14E-02	pCi/L	5.9E-02	U	1.61E-01	95.4		UIISO_PLATE_	2.0004E-01	06/20/2008				D
BLK	15117-96-1			5.9E-02						L	15:04				
8164623	U-238	5.14E-02	pCi/L	1.0E-01	U	2.23E-01	95.4		UIISO_PLATE_	2.0004E-01	06/20/2008				D
BLK	U-238			1.0E-01						L	15:04				

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd

Lab Sample Id: KPV51AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 11:13

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 05/28/2008

SAF Nbr	Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
	MW6-SBB-A19981									BM	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164624	C-14	2.42E+00	pCi/L	4.1E+00	U	8.18E+00	100.0		C14_LSC	2.00E-01	06/23/2008				D
BLK	14762-75-5			3.5E+00						L	20:49				

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd

Lab Sample Id: KPVMT1AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 13:19

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RTyp		
		MW6-SBB-A19981										BO	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164615	ALPHA	-9.34E-02	pCi/L	1.2E-01	U	4.65E-01	100.0		9310_ALPHAB	2.002E-01	06/26/2008				D
BLK	12587-46-1			1.2E-01						L	16:27				

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd

Lab Sample Id: KPVMV1AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 11:17

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
	MW6-SBB-A19981														
8164616	BETA	5.44E-01	pCi/L	1.0E+00	U	2.22E+00	100.0		9310_ALPHAB	2.002E-01	06/26/2008				
BLK	12587-47-2			1.0E+00						L	19:09				D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KPVW1AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 09:30

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BS	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164617 BLK	BE-7 13966-02-4	-4.19E+00	pCi/L	1.2E+01 1.2E+01	U	2.03E+01			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	CO-60 10198-40-0	-6.44E-01	pCi/L	1.3E+00 1.3E+00	U	2.18E+00			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	CS-134 13967-70-9	-1.06E+00	pCi/L	1.4E+00 1.4E+00	U	2.28E+00			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	CS-137 10045-97-3	-5.84E-01	pCi/L	1.3E+00 1.3E+00	U	2.25E+00			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	EU-152 14683-23-9	7.03E-01	pCi/L	3.5E+00 3.5E+00	U	6.12E+00			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	EU-154 15585-10-1	-3.66E+00	pCi/L	3.5E+00 3.5E+00	U	5.51E+00			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	EU-155 14391-16-3	-5.77E-01	pCi/L	2.8E+00 2.8E+00	U	4.83E+00			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	K-40 13966-00-2	-2.87E+01	pCi/L	2.0E+01 2.0E+01	U	3.54E+01			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	RU-106 13967-48-1	-9.28E+00	pCi/L	1.1E+01 1.1E+01	U	1.80E+01			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D
8164617 BLK	SB-125 14234-35-6	5.77E-01	pCi/L	3.3E+00 3.3E+00	U	5.87E+00			GAMMALL_GS	2.00E+00 L	06/20/2008 07:45				D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KPVMX1AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/20/2008 13:22

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 05/23/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164618	I-129L	-3.21E-02	pCi/L	1.5E-01	U	2.69E-01	92.2		I129LL_SEP_L	3.9668E+00	07/03/2008				D
BLK	15046-84-1			1.5E-01						L	06:58				

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KRCQM1AB

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 09:30

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BW	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8192442 BLK	Se-79 15758-45-9	-1.22E-01	pCi/L	7.3E+00 3.8E+00	U	9.13E+00	96.8		SE79_SEP_IE	2.002E-01 L	07/17/2008 01:59				D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

11

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KPVM01CS

Sdg/Rept Nbr: W05419 39536

Collection Date: 06/04/2008 11:17

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BD		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8164619 BS	SR-90 10098-97-2	1.37E+01	pCi/L	2.1E+00 6.8E-01		5.68E-01	86.6	1.34E+01 102.4	SRISO_SEP_P	1.00E+00 L	07/03/2008 05:39			70 130	D						

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05419.Edd, h:\Reportdb\edd\Fead\I\Rad\39536.Edd

Lab Sample Id: KPVM11CS

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 13:19

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164620 BS	Uranium 7440-61-1	3.44E+01	ug/L	4.1E+00 4.1E+00	8.32E-02		3.58E+01 96.1	UTOT_KPA	2.52E-02 ML	07/15/2008 15:29			70 130	D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KPVM11DS

Sdg/Rept Nbr: W05419 39536

Collection Date: 06/04/2008 13:19

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
	MW6-SBB-A19981													BG	H
8164620 BS	Uranium 7440-61-1	3.17E+00	ug/L	3.2E-01 3.2E-01		8.32E-02		3.60E+00 88.0	UTOT_KPA	2.52E-02 ML	07/15/2008 15:36			70 130	D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\ledd\Fead\I\Rad\W05419.Edd, h:\Reportdb\ledd\Fead\I\Rad\39536.Edd

Lab Sample Id: KPVM31CS

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 11:13

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 05/28/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BJ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164622 BS	NP-237 13994-20-2	1.07E+01	pCi/L	2.3E+00 1.4E+00		2.35E-01	78.2	9.38E+00 114.1	NP237_LLE_P	2.00E-01 L	06/26/2008 20:07			70 130	D

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KPVM41CS

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 09:57

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 05/28/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BL	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164623 BS	U-234 13966-29-5	8.60E+00	pCi/L	1.7E+00 1.0E+00		1.42E-01	99.5	8.67E+00 99.2	UIISO_PLATE_	2.0005E-01 L	06/20/2008 15:05			70 130	D
8164623 BS	U-235 15117-96-1	2.01E-01	pCi/L	1.6E-01 1.6E-01		1.42E-01	99.5	3.96E-01 50.8	UIISO_PLATE_	2.0005E-01 L	06/20/2008 15:05			70 130	D
8164623 BS	U-238 U-238	8.45E+00	pCi/L	1.7E+00 1.0E+00		1.42E-01	99.5	9.08E+00 93.0	UIISO_PLATE_	2.0005E-01 L	06/20/2008 15:05			70 130	D

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\Fead\VRad\W05419.Edd, h:\Reportdb\eddd\Fead\VRad\39536.Edd

Lab Sample Id: KPVM51CS

Sdg/Rept Nbr: W05419 39536

Collection Date: 05/27/2008 11:13

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 05/28/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BN		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8164624	C-14	4.88E+01	pCi/L	5.9E+00		8.18E+00	100.0	4.54E+01	C14_LSC	2.00E-01	06/23/2008			70	D						
BS	14762-75-5			4.8E+00				107.4		L	21:32			130							

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05419.Edd, h:\Reportdb\edd\Fead\I\Rad\39536.Edd

Lab Sample Id: KPVMT1CS

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 13:19

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164615 BS	ALPHA 12587-46-1	1.91E+01	pCi/L	4.4E+00 2.0E+00		6.33E-01	100.0	2.27E+01 84.3	9310_ALPHAB	2.003E-01 L	06/26/2008 16:27			70 130	D

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd

Lab Sample Id: KPVMV1CS

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 11:17

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BR	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164616 BS	BETA 12587-47-2	2.44E+01	pCi/L	4.0E+00 2.5E+00		2.68E+00	100.0	2.25E+01 108.4	9310_ALPHAB	2.003E-01 L	06/26/2008 19:09			70 130	D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05419.Edd, h:\Reportdb\edd\Fead\I\Rad\39536.Edd

Lab Sample Id: KPVMW1CS

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 09:30

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RTyp		
		MW6-SBB-A19981										BT	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164617 BS	CO-60 10198-40-0	3.99E+01	pCi/L	8.3E+00 8.3E+00		3.79E+00		3.77E+01 105.8	GAMMALL_GS	2.0007E+00 L	06/20/2008 07:45			70 130	D
8164617 BS	CS-137 10045-97-3	5.46E+01	pCi/L	9.2E+00 9.2E+00		4.19E+00		4.95E+01 110.2	GAMMALL_GS	2.0007E+00 L	06/20/2008 07:45			70 130	D
8164617 BS	EU-152 14683-23-9	7.69E+01	pCi/L	1.4E+01 1.4E+01		8.58E+00		7.53E+01 102.2	GAMMALL_GS	2.0007E+00 L	06/20/2008 07:45			70 130	D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

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B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05419.Edd, h:\Reportdb\edd\Fead\I\Rad\39536.Edd

Lab Sample id: KPVMX1CS

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/20/2008 13:22

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 05/23/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RTyp		
		MW6-SBB-A19981										BV	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164618	I-129L	9.61E+00	pCi/L	1.3E+00		4.20E-01	84.7	9.72E+00	I129LL_SEP_L	3.9761E+00	07/03/2008			70	D
BS	15046-84-1			1.3E+00				98.9		L	06:58			130	

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KN1JT1HR

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 09:57

Client Id: B1V9W2

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 05/28/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr		Suffix	Decant	Distilled Volume		File Id		FSuffix	RTyp
I08-037		MW6-SBB-A19981												AR	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164621	Se-79	6.86E+00	pCi/L	9.9E+00	U	1.14E+01	79.9		SE79_SEP_IE	1.999E-01	07/03/2008	122.1	0.7		D
DUP	15758-45-9	1.66E+00		4.9E+00						L	19:07	20.0	3		

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KN1JT1JR

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 09:57

Client Id: B1V9W2

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 05/28/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
108-037	MW6-SBB-A19981								AS	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164623	U-234	1.24E+00	pCi/L	4.4E-01		1.77E-01	105.7		UIISO_PLATE_	2.0001E-01	06/20/2008	4.1	0.2		D
DUP	13966-29-5	1.19E+00		4.0E-01						L	15:03	20.0	3		
8164623	U-235	3.13E-02	pCi/L	6.4E-02	U	1.50E-01	105.7		UIISO_PLATE_	2.0001E-01	06/20/2008	445.6	1.		D
DUP	15117-96-1	-1.19E-02		6.4E-02						L	15:03	20.0	3		
8164623	U-238	7.07E-01	pCi/L	3.2E-01		1.77E-01	105.7		UIISO_PLATE_	2.0001E-01	06/20/2008	6.6	0.2		D
DUP	U-238	7.55E-01		3.0E-01						L	15:03	20.0	3		

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd

Lab Sample Id: KN1JX1HR

Sdg/Rept Nbr: W05419 39536

Collection Date: 05/27/2008 11:13

Client Id: B1V9W3

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 05/28/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
108-037		MW6-SBB-A19981																AT		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8164622	NP-237	0.00E+00	pCi/L	9.1E-02	U	2.13E-01	80.0		NP237_LLE_P	1.999E-01	06/26/2008	0.0	0.		D						
DUP	13994-20-2	0.00E+00		9.1E-02						L	20:06	20.0	3								

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05419.Edd, h:\Reportdb\edd\Fead\Rad\39536.Edd

Lab Sample Id: KN1JX1JR

Sdg/Rept Nbr: W05419

39536

Collection Date: 05/27/2008 11:13

Client Id: B1V9W3

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 05/28/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
108-037		MW6-SBB-A19981																AU		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8164624	C-14	1.62E+00	pCi/L	4.1E+00	U	8.18E+00	100.0		C14_LSC	2.00E-01	06/23/2008	3818.4	1.1		D						
DUP	14762-75-5	-1.46E+00		3.4E+00						L	23:40	20.0	3								

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05419.Edd, h:\Reportdb\edd\Fead\VRad\39536.Edd

Lab Sample Id: KNTWQ1CR

Sdg/Rept Nbr: W05419 39536

Collection Date: 05/20/2008 13:22

Client Id: B1V6L4

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 05/23/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
108-038		MW6-SBB-A19981																AV		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8164618	I-129L	1.81E-01	pCi/L	1.4E-01	U	2.95E-01	95.1		I129LL_SEP_L	3.8637E+00	07/02/2008	15.5	0.3		D						
DUP	15046-84-1	1.55E-01		1.4E-01						L	16:27	20.0	3								

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\ledd\Fead\I\Rad\W05419.Edd, h:\Reportdb\ledd\Fead\I\Rad\39536.Edd

Lab Sample Id: KPEV31HR

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 09:30

Client Id: B1V9T9

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RTyp		
I08-037		MW6-SBB-A19981										AW	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164617	BE-7	7.39E+00	pCi/L	2.0E+01	U	3.54E+01			GAMMALL_GS	1.9497E+00	06/20/2008	2.7	0.		D
DUP	13966-02-4	7.60E+00		2.0E+01						L	07:44	20.0	3		
8164617	CO-60	-5.11E-01	pCi/L	1.7E+00	U	3.15E+00			GAMMALL_GS	1.9497E+00	06/20/2008	1005.3	1.		D
DUP	10198-40-0	7.65E-01		1.7E+00						L	07:44	20.0	3		
8164617	CS-134	7.99E-01	pCi/L	2.2E+00	U	4.08E+00			GAMMALL_GS	1.9497E+00	06/20/2008	251.9	0.6		D
DUP	13967-70-9	-9.17E-02		2.2E+00						L	07:44	20.0	3		
8164617	CS-137	1.83E+00	pCi/L	2.2E+00	U	4.14E+00			GAMMALL_GS	1.9497E+00	06/20/2008	196.5	1.2		D
DUP	10045-97-3	1.60E-02		2.2E+00						L	07:44	20.0	3		
8164617	EU-152	3.40E+00	pCi/L	5.8E+00	U	1.04E+01			GAMMALL_GS	1.9497E+00	06/20/2008	255.6	0.9		D
DUP	14683-23-9	-4.15E-01		5.8E+00						L	07:44	20.0	3		
8164617	EU-154	1.37E+00	pCi/L	6.2E+00	U	1.17E+01			GAMMALL_GS	1.9497E+00	06/20/2008	126.2	0.2		D
DUP	15585-10-1	3.10E-01		6.2E+00						L	07:44	20.0	3		
8164617	EU-155	-5.13E-01	pCi/L	4.3E+00	U	7.40E+00			GAMMALL_GS	1.9497E+00	06/20/2008	495.6	0.6		D
DUP	14391-16-3	1.21E+00		4.3E+00						L	07:44	20.0	3		
8164617	K-40	8.04E+00	pCi/L	5.6E+01	U	3.32E+01			GAMMALL_GS	1.9497E+00	06/20/2008	0.0	0.5		D
DUP	13966-00-2	-1.17E+01		5.6E+01						L	07:44	20.0	3		
8164617	RU-106	5.46E+00	pCi/L	1.9E+01	U	3.46E+01			GAMMALL_GS	1.9497E+00	06/20/2008	25.3	0.1		D
DUP	13967-48-1	4.23E+00		1.9E+01						L	07:44	20.0	3		
8164617	SB-125	-1.10E+00	pCi/L	5.4E+00	U	9.26E+00			GAMMALL_GS	1.9497E+00	06/20/2008	0.0	0.		D
DUP	14234-35-6	-9.73E-01		5.4E+00						L	07:44	20.0	3		

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VARad\W05419.Edd, h:\Reportdb\edd\Fead\VARad\39536.Edd

Lab Sample Id: KPEVW1ER

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 13:19

Client Id: B1TKC2

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr		Suffix	Decant	Distilled Volume		File Id		FSuffix	RTyp
S08-003		MW6-SBB-A19981												AX	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164615	ALPHA	5.92E+00	pCi/L	2.2E+00		1.75E+00	100.0		9310_ALPHAB	1.427E-01	06/26/2008	.0	0.		D
DUP	12587-46-1	5.93E+00		1.8E+00						L	17:35	20.0	3		

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05419.Edd, h:\Reportdb\edd\Fead\I\Rad\39536.Edd

Lab Sample Id: KPEVW1GR

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 13:19

Client Id: B1TKC2

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
S08-003	MW6-SBB-A19981												AZ	H
8164620 DUP	Uranium 7440-61-1	1.25E+01 1.23E+01	ug/L	1.5E+00 1.5E+00	8.35E-02			UTOT_KPA	2.51E-02 ML	07/15/2008 15:43	1.8 20.0	0.2 3		D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05419.Edd, h:\Reportdb\edd\Fead\I\Rad\39536.Edd

Lab Sample Id: KPEX61GR

Sdg/Rept Nbr: W05419 39536

Collection Date: 06/04/2008 11:17

Client Id: B1RTP0

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
S08-001	MW6-SBB-A19981								BA	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164616	BETA	6.70E+00	pCi/L	1.9E+00	2.81E+00	100.0		9310_ALPHAB	2.002E-01	06/26/2008	16.6	0.8		D
DUP	12587-47-2	5.67E+00		1.7E+00					L	19:09	20.0	3		

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05419.Edd, h:\Reportdb\edd\FeadIV\Rad\39536.Edd

Lab Sample Id: KPEX61HR

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 11:17

Client Id: B1RTP0

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
S08-001	MW6-SBB-A19981								BB	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164619	SR-90	2.56E-01	pCi/L	2.8E-01	U	5.76E-01	85.8		SRISO_SEP_P	1.0002E+00	07/03/2008	22.5	0.3		D
DUP	10098-97-2	3.21E-01		2.8E-01						L	05:39	20.0	3		

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 21, 2008

TestAmerica Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd, h:\Reportdb\edd\Fead\W05419.Edd

Lab Sample Id: KPEVW1FW

Sdg/Rept Nbr: W05419

39536

Collection Date: 06/04/2008 13:19

Client Id: B1TKC2

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
S08-003	MW6-SBB-A19981								AY	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8164620 MS	Uranium 7440-61-1	4.62E+01	ug/L	5.5E+00 5.5E+00		8.38E-02		3.61E+01 128.1	UTOT_KPA	2.50E-02 ML	07/15/2008 15:41			60 140	D

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	L. Dinh	Calibration Curve Information				SOP Information		BATCH #	8151262	
Start Date:	5/29/2008		Amount	Conc.(mg/L)	ABS.	RICHI-WC-5003		SDG #	W05419	
Start Time:		Blank	0.000	0.000	0.000	Revision 7		Matrix	Water	
End Date:	5/29/2008	Std. 1	0.100	0.050	0.100					
End Time:		Std. 2	0.500	0.250	0.480					
		Std. 3	0.750	0.375	0.718					
Analyst Signature:	<i>L. Dinh</i>	Std. 4	1.500	0.750	1.412	MDL (mg/L)		0.002		
		Std 5	2.000	1.000	1.069					
Date:	5/30/08	Standard Volume (mL):			100.000					
		Date of Curve:			5/29/2008					
		Calibration Information:		ICV Information:		LCS Information:		Matrix Spike Information:		
Dilution ID #		Cr-08-00111		Cr-08-00112		Cr-08-00111		Cr-08-00111		
Prep Date:		05/29/08		05/29/08		05/29/08		05/29/08		
Concentration (mg/L)		50		50		50		50		
Expiration Date:		05/30/08		05/30/08		05/30/08		05/30/08		
Pipettor(s)		70,190		190		190		190		
Volume Used (Expected Value		1.000		0.50000		0.50		
								0.26316		
Expected values are only amounts added in mg and not final concentrations										
Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.967	0.000	0.967	1	0.5133	0.513	102.66%
n/a	n/a	ICB	100.000	0.000	0.000	0.000	1	<MDL	<MDL	
KN49G1AA	n/a	Prep Blank	100.000	0.000		0.000	1	<MDL	<MDL	
KN49G1AC	n/a	LCS	100.000	0.951		0.951	1	0.5048	0.505	100.95%
KN3T71AA	B1V608'	Sample	100.000	0.005		0.005	1	-0.0018	<MDL	
KN3T71AC-S	B1V608'-MS	MS	100.000	0.505		0.505	1	0.2659	0.266	101.05%
KN3T71AD-D	B1V608'-MSD	MSD	100.000	0.505		0.505	1	0.2659	0.266	101.05%
KN3T71AE-X	B1V608'-DUP	Duplicate	100.000	0.004		0.004	1	-0.0024	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.966		0.966	1	0.5128	0.513	102.56%
n/a	n/a	CCB	100.000	-0.001		-0.001	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	L. Dinh	Calibration Curve Information				SOP Information		BATCH #	8154426
Start Date:	6/2/2008		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05419
Start Time:		Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	6/2/2008	Std. 1	0.100	0.050	0.098				
End Time:		Std. 2	0.500	0.250	0.475				
		Std. 3	0.750	0.375	0.723				
Analyst Signature:	<i>L. Dinh</i>	Std. 4	1.500	0.750	1.417	MDL (mg/L)		0.002	Instrument Information
		Std 5	2.000	1.000	1.865			Instrument:	Hach DR2010
Date:	6/3/08	Standard Volume (mL):			100.000			Wavelength:	540
		Date of Curve:			6/2/2008			R Squared	0.99983
								Slope:	1.86829
								Intercept:	0.00790

Dilution ID #		Cr-08-00113	Cr-08-00114	Cr-08-00113	Cr-08-00113
Prep Date:		06/02/08	06/02/08	06/02/08	06/02/08
Concentration (mg/L)		50	50	50	50
Expiration Date:		06/03/08	06/03/08	06/03/08	06/03/08
Pipettor(s)		70,190	190	190	190
Volume Used	Expected Value	1.000	0.50000	1.00	0.50000
		0.50	0.26316		

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.955	0.000	0.955	1	0.5069	0.507	101.39%
n/a	n/a	ICB	100.000	0.000	0.000	0.000	1	<MDL	<MDL	
KN8D11AA	n/a	Prep Blank	100.000	0.000		0.000	1	<MDL	<MDL	
KN8D11AC	n/a	LCS	100.000	0.955		0.955	1	0.5069	0.507	101.39%
KN78H1AA	B1V5L1'	Sample	100.000	0.017		0.017	1	0.0049	0.005	
KN78H1AC-S	B1V5L1'-MS	MS	100.000	0.523		0.523	1	0.2757	0.276 C. 211	102.92%
KN78H1AD-D	B1V5L1'-MSD	MSD	100.000	0.522		0.522	1	0.2752	0.275 C. 210	102.71%
KN78H1AE-X	B1V5L1'-DUP	Duplicate	100.000	0.016		0.016	1	0.0043	0.004	SKS 6/3/08
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.954		0.954	1	0.5064	0.506	101.28%
n/a	n/a	CCB	100.000	-0.001		-0.001	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

TestAmerica

Form GC-223, 12/05, Rev. 0

TA Richland
Hexavalent Chromium - Water

Analyst:	D. Petty	Calibration Curve Information				SOP Information		BATCH #		8155303
Start Date:	6/3/2008		Amount	Conc. (mg/L)	ABS.	RICH-WC-5003		SDG #	W05419	
Start Time:		Blank	0.000	0.000	0.000	Revision 7		Matrix	Water	
End Date:	6/3/2008	Std. 1	0.100	0.050	0.100					
End Time:		Std. 2	0.500	0.250	0.495					
		Std. 3	0.750	0.375	0.731					
		Std. 4	1.500	0.750	1.439					
		Std 5	2.000	1.000	1.888					
Analyst Signature:		Standard Volume (mL):				100.000	MDL (mg/L)		0.002	
Date:	06/03/08	Date of Curve:				6/3/2008	Instrument Information			
						Instrument: Hach DR2010				
						Wavelength: 540				
						R Squared 0.99976				
						Slope: 1.89023				
						Intercept: 0.01153				
Dilution ID #		Calibration Information:		ICV Information:		LCS Information:		Matrix Spike Information:		
Cr-08-00115		Cr-08-00115		Cr-08-00115		Cr-08-00115		Cr-08-00115		
Prep Date:		06/03/08		06/03/08		06/03/08		06/03/08		
Concentration (mg/L)		50		50		50		50		
Expiration Date:		06/04/08		06/04/08		06/04/08		06/04/08		
Pipettor(s)		70,190		190		190		190		
Volume Used (Expected Value		1.000		0.50000		1.00		0.50000
								0.50		0.26316
Expected values are only amounts added in mg and not final concentrations										
Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.982	0.000	0.982	1	0.5134	0.513	102.68%
n/a	n/a	ICB	100.000	0.000	0.000	0.000	1	<MDL	<MDL	
KPAKX1AA	n/a	Prep Blank	100.000	0.000		0.000	1	<MDL	<MDL	
KPAKX1AC	n/a	LCS	100.000	0.972		0.972	1	0.5081	0.508	101.62%
KPAJ71AA	B1V6Y4'	Sample	100.000	0.004		0.004	1	-0.0040	<MDL	
KPAJ71AC-S	B1V6Y4'-MS	MS	100.000	0.515		0.515	1	0.2664	0.266	101.21%
KPAJ71AD-D	B1V6Y4'-MSD	MSD	100.000	0.513		0.513	1	0.2653	0.265	100.81%
KPAJ71AE-X	B1V6Y4'-DUP	Duplicate	100.000	0.003		0.003	1	-0.0045	<MDL	
KPAJ01AA	B1V5J7'	Sample	100.000	0.121		0.121	1	0.0579	0.058	
KPCLCS1AA	sys 7/8/08		100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.965		0.965	1	0.5044	0.504	100.88%
n/a	n/a	CCB	100.000	0.000		0.000	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

Lot No., Due Date: J8E280299, J8F050164; 07/21/2008
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 8164623; RUI SO Uiso by ALP
SDG, Matrix: W05419; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review

Alvin E. Johnson

Date

6/27/08

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8164623

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Erika Jord Date: 6/30/18

Lot No., Due Date: J8E280299, J8F050164; 07/21/2008
 Client, Site: 384868: PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 8164622; RNP237 Np-237 w/tracer
 SDG, Matrix: W05419; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review

Alvin E. Michaels

Date

6/27/08

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8164622

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Erika [Signature] Date: 6/30/18

Lot No., Due Date: J8F050162, J8F050177; 07/21/2008
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 8164615; RALPHA-A Alpha by GPC-Am
SDG, Matrix: W05419; WATER

8.0	Correction Calculation Protocol Used.	OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples	OK	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units	OK	Yes	No	N/A
8.03	Batch Contains the Required QC Appropriate for the Method	OK	Yes	No	N/A
8.04	The Correct Tracer and QC Vials Were Used in the Samples	OK	Yes	No	N/A
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	OK	Yes	No	N/A
8.06	At Least the Minimum Sample Volume Was Used	Analysis Volume => KPEVW1AA 142.90<200.00 KPEX61AA 166.80<200.00 Q:VB	Yes	No	N/A
8.07	The Correct Count Geometry was Used.	OK	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	OK	Yes	No	N/A
8.09	Method Blank is within Control Limits.	OK	Yes	No	N/A
8.1	Comments:				
8.11	Matrix Blank is within Control Limits.	No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	OK	Yes	No	N/A
8.13	QAS Specified Duplicate Equation Value within Control Limits.	OK (RPD)	Yes	No	N/A
8.14	LCS within Control Limits.	OK	Yes	No	N/A
8.15	MLCS within Control Limits.	No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16	MS within Control Limits.	No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17	Tracer within Control Limits.	OK	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples)	OK	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL.	OK	Yes	No	N/A
8.2	Comments:				
8.21	Result < Lc, Activity Not Detected, U Flag.	No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag.	Batch Positive Result => KPEVW1AA ALPHA 5.9E+00 L:1.7E+00	Yes	No	N/A
8.23	Result <= Action Level, when Defined.	OK; No Action Level Found => ALPHA	Yes	No	N/A
8.24	Result + 3s >= 0, Not Too Negative.	OK; No Callin Level Found => ALPHA	Yes	No	N/A
8.25	Counting Spectrum are within FWHM Limits.	No FWHM found in Batch Data!	Yes	No	N/A

8.27 Correct Count Library Used.

Yes No N/A

No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)

Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)

Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate.

Yes No N/A

OK

First Level Review

Lisa Cantorson

Date

6/30/08

TAL Richland

OAS RADCALCV4.8.33

TESTAMERICA

Page 2

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8164615

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		✓
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Ericka [Signature] Date: 6/30/18

Lot No., Due Date: J8F050162, J8F050177; 07/21/2008
 Client, Site: 384868; PGW 615 HANFORD HANFORD
 QC Batch No., Method Test: 8164616; RBETA-SR Beta by GPC-Sr/Y
 SDG, Matrix: W05419; WATER

8.0	Correction Calculation Protocol Used.	Yes	No	N/A
	OK	✓		
8.01	The Appropriate Methods Were Used To Analyze the Samples	Yes	No	N/A
	OK	✓		
8.02	Final Results Are in the Appropriate Activity Units	Yes	No	N/A
	OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method	Yes	No	N/A
	OK	✓		
8.04	The Correct Tracer and QC Vials Where Used in the Samples	Yes	No	N/A
	OK	✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	Yes	No	N/A
	OK	✓		
8.06	At Least the Minimum Sample Volume Was Used	Yes	No	N/A
	OK	✓		
8.07	The Correct Count Geometry was Used.	Yes	No	N/A
	OK	✓		
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	Yes	No	N/A
	OK	✓		
8.09	Method Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.1	Comments:			
8.11	Matrix Blank is within Control Limits.	Yes	No	N/A
	No Matrix Blanks (MBIs) found in Batch!			✓
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	Yes	No	N/A
	OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits.	Yes	No	N/A
	OK (RPD)	✓		
8.14	LCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.15	MLCS within Control Limits.	Yes	No	N/A
	No Matrix Spikes (MLCS) found in Batch!			✓
8.16	MS within Control Limits.	Yes	No	N/A
	No Matrix Spike Samples (MS) found in Batch!			✓
8.17	Tracer within Control Limits.	Yes	No	N/A
	OK	✓		
8.18	Samples are above Minimum Tracer Yield (No Failed Samples)	Yes	No	N/A
	OK	✓		
8.19	Sample Specific MDC <= CRDL.	Yes	No	N/A
	OK	✓		
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag.	Yes	No	N/A
	No Limit Specified!			✓
8.22	Result < Mdc, Activity Not Detected, U Flag.	Yes	No	N/A
	Batch Positive Result =>			✓
	KPEVW1AC BETA 1.4E+01 L:2.9E+00			
	KPEX61AC BETA 5.7E+00 L:2.9E+00			
8.23	Result <= Action Level, when Defined.	Yes	No	N/A
	OK; No Action Level Found => BETA	✓		
	OK; No Callin Level Found => BETA			
8.24	Result + 3s >= 0, Not Too Negative.	Yes	No	N/A
	OK	✓		
8.25	Counting Spectrum are within FWHM Limits.	Yes	No	N/A
	No FWHM found in Batch Data!			✓

8.27 Correct Count Library Used.

Yes No N/A

No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)

Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)

Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate.

Yes No N/A

OK

First Level Review

Lisa Gustafson

Date

6/30/08

TAL Richland

QAS_RADCALCv4.8.33

TESTAMERICA

Page 2

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 81164616

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			✓
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		✓
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			✓
1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Erich Jrd Date: 6/30/18

Lot No., Due Date: J8F050177; 07/21/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8164619; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix: W05419; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review

Date 7-10-8

TAL Richland

QAS_RADCALCv4.8.33

TESTAMERICA

Data Review Checklist RADIOCHEMISTRY Second Level Review

Batch Number: 8164619

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: _____

Date: 7/10/08

Lot No., Due Date: J8E280299,J8F050164,J8F050177; 07/21/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8164617; RGAMMA Gamma by GER

SDG, Matrix: W05419; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review

Date

AL Richland

OAS RADCALCv4.8.33

TESTAMERICA

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8164617

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Erick O. [Signature] Date: 6/30/18

Lot No., Due Date: J8E280293, J8E280295, J8E280299, J8E230328, J8F040162, J8F040165, J8F050164, J8F050177;
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 8164618; RGAMLEPS Gamma by LEPS
SDG, Matrix: W05419; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes ☒ No ☐ N/A ☐

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes ☒ No ☐ N/A ☐

2.2 Are the QC appropriate for the analysis included in the batch? Yes ☒ No ☐ N/A ☐

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes ☒ No ☐ N/A ☐

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes ☒ No ☐ N/A ☐

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.2 Is the LCS result, yield, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes ☒ No ☐ N/A ☒

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes ☒ No ☐ N/A ☐

3.5 Are the sample yields and MDAs within contract limits? Yes ☒ No ☐ N/A ☐

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes ☒ No ☐ N/A ☐

4.2 Were analysis volumes entered correctly? Yes ☒ No ☐ N/A ☐

4.3 Were Yields entered correctly? Yes ☒ No ☐ N/A ☐

4.4 Were spectra reviewed/meet contractual requirements? Yes ☒ No ☐ N/A ☐

4.5 Were raw counts reviewed for anomalies? Yes ☒ No ☐ N/A ☐

5.0 Other

5.1 Are all nonconformances included and noted? Yes ☐ No ☒ N/A ☐

5.2 Are all required forms filled out? Yes ☒ No ☐ N/A ☐

5.3 Was the correct methodology used? Yes ☒ No ☐ N/A ☐

5.4 Was transcription checked? Yes ☒ No ☐ N/A ☐

5.5 Were all calculations checked at a minimum frequency? Yes ☒ No ☐ N/A ☐

5.6 Are worksheet entries complete and correct? Yes ☒ No ☐ N/A ☐

3.0 Comments on any No response:

First Level Review

[Signature]

Date

7/10/08

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8164618

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			✓
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			✓
1. Are all Non-conformances included and noted?			
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Eino Jod Date: 7/13/18

Lot No., Due Date: J8F050164; 07/21/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8192442; RSE79 Se-79 by LSC
SDG, Matrix: # 8164621 SLS 7/21/08
W05419; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A
☒ Yes ☐ No ☐ N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A
☒ Yes ☐ No ☐ N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A
☒ Yes ☐ No ☐ N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A
☒ Yes ☐ No ☐ N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A
☒ Yes ☐ No ☐ N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A
☒ Yes ☐ No ☐ N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A
☒ Yes ☐ No ☐ N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A
☒ Yes ☐ No ☐ N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A
☒ Yes ☐ No ☐ N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A
☒ Yes ☐ No ☐ N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A
☒ Yes ☐ No ☐ N/A

4.2 Were analysis volumes entered correctly? Yes No N/A
☒ Yes ☐ No ☐ N/A

4.3 Were Yields entered correctly? Yes No N/A
☒ Yes ☐ No ☐ N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A
☒ Yes ☐ No ☐ N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A
☒ Yes ☐ No ☐ N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A
☒ Yes ☐ No ☐ N/A

5.2 Are all required forms filled out? Yes No N/A
☒ Yes ☐ No ☐ N/A

5.3 Was the correct methodology used? Yes No N/A
☒ Yes ☐ No ☐ N/A

5.4 Was transcription checked? Yes No N/A
☒ Yes ☐ No ☐ N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A
☒ Yes ☐ No ☐ N/A

5.6 Are worksheet entries complete and correct? Yes No N/A
☒ Yes ☐ No ☐ N/A

6.0 Comments on any No response:
Please see NCM # 10-12701

First Level Review

Date

7-18-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8192442 & 8164621
 KS 7/21/08

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?		✓	
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?		✓	
7. Do the MS/MSD results and yields meet acceptance criteria?	✓		
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: Recounted due to Low LCS.

C - New

Second Level Review: _____

Dr. Kelly

Date: 07-21-08

Clouseau Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-12701	Classification: Anomaly
NCM Initiated By: John Norton	Status: GLREVIEW
Date Opened: 07/18/2008	Production Area: Environmental - Sep
Date Closed:	Tests: None
	Lot #'s (Sample #'s): J8F050164 (1),
	QC Batches: None.,
Nonconformance: Tracer yield out of limits	
Subcategory: Unknown	

Problem Description / Root Cause

Name	Date	Description
John Norton	07/18/2008	This sample provided a low tracer yield and did not meet the CRDL.

Corrective Action

Name	Date	Corrective Action
John Norton	07/18/2008	The sample was re-analyzed in batch # 8192442.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position
---------------	-------------	----------

Lot No., Due Date: J8E280299,J8F050164; 07/21/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8164624; RC14 C-14 by LSC
SDG, Matrix: W05419; WATER

8.0	Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03	Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06	At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07	The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09	Method Blank is within Control Limits. OK	Yes	No	N/A
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found n Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13	QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> KN1JX1AJ C-14 3800.0 (RPD)	Yes	No	N/A
8.14	LCS within Control Limits. OK	Yes	No	N/A
8.15	MLCS within Control Limits. No Matrix Spikes (MLCS) found n Batch!	Yes	No	N/A
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17	Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes	No	N/A
8.23	Result <= Action Level, when Defined. OK; No Action Level Found => C-14 OK; No Callin Level Found => C-14	Yes	No	N/A
8.24	Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25	Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.27 Correct Count Library Used.

Yes No N/A

No Count Library found in Batch Data!

✓

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions.)

Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions.)

Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate.

Yes No N/A

OK

✓

First Level Review

Steve Anderson

Date

4/25/08

TAL Richland

QAS_RADCALCv4.8.33

TESTAMERICA

Page 2

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8164624

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			✓
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		✓
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			✓
1. Are all Non-conformances included and noted?			
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Erick J. [Signature] Date: 6/25/8

Lot No., Due Date: J8F050162; 07/21/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8164620; RUNAT UNat by KPA
SDG, Matrix: W05419; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review

Date

TAL Richland

QAS_RADCALCv4.8.33

TESTAMERICA

Data Review Checklist RADIOCHEMISTRY Second Level Review

Batch Number: 8164620

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?	✓		
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: _____

Date: 7/17/08

**Richland Laboratory
 Data Review Check List
 Hexavalent Chromium**

SXS

Batch Number(s): 8151262 WQ 5419 J8E 290299				
Lab Sample Numbers or				
Method/Test/Parameter: Cr+6 in Water / RICH-WC-5003				
Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd Level Review (✓)
A. Initial Calibration	✓			
1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration	✓			
1. CCV analyzed at required frequency and all parameters within QC limits?				✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis	✓			
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?	✓			✓
2. Were all sample holding times met?	✓			✓
D. QC Samples	✓			
1. All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?			✓	✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd Level Review (✓)
E. Other	✓			
1. Are all nonconformances included and noted?				✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response:

Analyst: *Leah D.*

Date: 5/30/08

Second-Level Review: *J. Petty*

Date: 07/08/08

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): 8154426 58F020174 W05419				
Lab Sample Numbers or				
Method/Test/Parameter: Cr+6 in Water / RICH-WC-5003				
Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd Level Review (✓)
A. Initial Calibration	✓			
1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration	✓			
1. CCV analyzed at required frequency and all parameters within QC limits?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis	✓			
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?	✓			✓
2. Were all sample holding times met?	✓			✓
D. QC Samples	✓			
1. All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?			✓	✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd Level Review (✓)
E. Other	✓			
1. Are all nonconformances included and noted?				✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response:

Analyst: *Lewis D*

Date: 6/3/08

Second-Level Review: *McLarty*

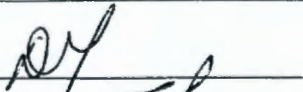
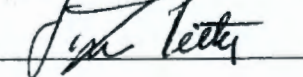
Date: 07/08/08

Richland Laboratory Data Review Check List Hexavalent Chromium

Batch Number(s): 8155503 WQ5419 J8F 030292 & J8F 040186				
Lab Sample Numbers or				
Method/Test/Parameter: Cr+6 in Water / RICH-WC-5003				
Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd Level Review (✓)
A. Initial Calibration	✓			
1. Performed at required frequency with required number of levels?	✓			/
2. Correlation coefficient within QC limits?	✓			/
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			/
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			/
B. Continuing Calibration	✓			
1. CCV analyzed at required frequency and all parameters within QC limits?				/
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			/
C. Sample Analysis	✓			
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?	✓			/
2. Were all sample holding times met?	✓			/
D. QC Samples	✓			
1. All results for the preparation blank below limits?	✓			/
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			/
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			/
4. Analytical spikes within QC limits where applicable?			✓	/
5. ICP only: One serial dilution performed per SDG?			✓	/
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	/
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	/

Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd Level Review (✓)
E. Other	✓			
1. Are all nonconformances included and noted?				/
2. Is the correct date and time of analysis shown?	✓			/
3. Did the analyst sign and date the front page of the analytical run?	✓			/
4. Correct methodology used?	✓			/
5. Transcriptions checked?	✓			/
6. Calculations checked at minimum frequency?	✓			/
7. Units checked?	✓			/

Comments on any "No" response:

Analyst: 
 Second-Level Review: 

Date: 6/3/08
 Date: 07/08/08

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # I08-038-61	
		J8E230328 W05419 DUE 7708 KNTWQ		Page 1 of 1	
Collector		Contact/Requester Steve Trent	Telephone No. 509-373-5869		MSIN FAX
SAF No. I08-038		Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title 2ZP1 MAY 2008		HNF-N-506-10	Ice Chest No. 6W5-089		Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol CERCLA		Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By R.D. Julian	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 5/23/08 1030	Received By KB Hulse	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 5/23/08 1030	Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge W = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By KB Hulse	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 5/23/08 1215	Received By S. Smith	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 5/23/08 1215		
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #	
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108-038-58

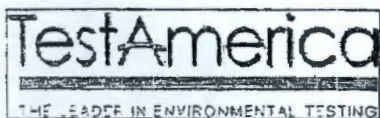
J8EZ30328 W05419 DnE 7708 KNTW6

Page 1 of 1

Collector	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX
SAF No. 108-038	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title 2ZP1 MAY 2008	INF-N-506-10	Ice Chest No. - 6W5-009 Temp.		
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol CERCLA	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 200 Area Generator Knowledge Information Form applies.		

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *			
R.D. Juan			5/23/08 10:30	KB Hulse	KB Hulse		5/23/08 10:30	S	= Soil	DS	= Drum Solid
Relinquished By			Date/Time	Received By			Date/Time	SE	= Sediment	DL	= Drum Liquid
KB Hulse			5/23/08 12:15	S. Smith	S. Smith		05/23/08 12:15	SO	= Solid	T	= Tissue
Relinquished By			Date/Time	Received By			Date/Time	SL	= Sludge	WI	= Wine
								W	= Water	L	= Liquid
								O	= Oil	V	= Vegetation
								A	= Air	X	= Other
Relinquished By			Date/Time	Received By			Date/Time				
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time			



Sample Check-in List

Date/Time Received: 05/23/08 12:15 GM Screen Result .07

Client: P6W SDG #: W05419 NA [] SAF #: I08-038 NA []

Work Order Number: 18E230328 Chain of Custody # I08-038-61,58

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []

6. Number of samples in shipping container: 2

7. Sample holding times exceeded? NA ☒ Yes [] No []

8. Samples have:
____ Tape _____ Hazard Labels
____ Custody Seals ☒ Appropriate Sample Labels

9. Samples are:
____ ☒ In Good Condition _____ Leaking
____ Broken _____ Have Air Bubbles
(Only for samples requiring no head space.)

10. Sample pH taken? NA [] pH<2 [] pH>2 ☒ pH>9 [] Amount HNO₃ Added None

11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [] No ☒

13. Description of anomalies (include sample numbers): _____

Sample Custodian: D. Smith Date: 05/23/08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

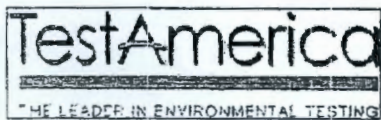
[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W08-005-328	
		J8E280293 W05419 Due 071105		Page 1 of 1	
Collector R.D. Julian		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. W08-005		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title RCRA MAY 2008		HNF-IV-506-12		Ice Chest No. Temp. 6W1	
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol RCRA		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Site-Wide Generator Knowledge Information Form applies.		Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

Relinquished By R. D. Julian	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time MAY 28 2008	Received By R. A. Shepard	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time MAY 28 2008	Matrix *	
Relinquished By R. A. Shepard	<i>[Signature]</i>	<i>[Signature]</i>	Date/Time 5/28/08	Received By R. A. Shepard	<i>[Signature]</i>	<i>[Signature]</i>	Date/Time 5/28/08	S = Soil SF = Sediment SO = Solid SL = Shdve W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tiesue WI = Wine L = Limid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time	



Sample Check-in List

Date/Time Received: 05/28/08 1325 GM Screen Result .1

Client: P6W SDG #: W05419 NA [] SAF #: W08005 NA []

Work Order Number: J8E280293 Chain of Custody # W08005-328

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes [☒] No []
2. Custody Seals dated and signed? NA [] Yes [☒] No []
3. Chain of Custody record present? NA [] Yes [☒] No []
4. Cooler Temperature: _____ NA [☒] 5. Vermiculite/packing materials is NA [☒] Wet [] Dry []

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? NA [☒] Yes [] No []

8. Samples have:

_____ Tape

_____ Custody Seals

_____ Hazard Labels

_____ Appropriate Sample Labels

9. Samples are:

_____ ☒ In Good Condition

_____ Broken

_____ Leaking

_____ Have Air Bubbles

(Only for samples requiring no head space.)

10. Sample pH taken? NA [] pH < 2 [] pH > 2 [☒] pH > 9 [] Amount HNO₃ Added none

11. Sample Location, Sample Collector Listed? *

*For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [] No [☒]

13. Description of anomalies (include sample numbers): _____

Sample Custodian: RPH Date: 5/28/08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

TESTED DATE	FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. #	108-038-2
		J8E280295 W05419 Due 071108		Page 1 of 1	
	Collector R.D. Julian	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX
	SAF No. 108-038	Sampling Origin Hanford Site	Purchase Order/Charge Code		
	Project Title 2ZPL MAY 2008	HNF-IV-50612	Ice Chest No. GW1	Temp.	
	Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
	Protocol CERCLA	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E280295 405419 Due 07/11/08

Page 1 of 1

Collect **R. D. Julian**

Contact/Requester	
--------------------------	--

Telephone No.

MSIN**FAX****SAF No.**

Steve Trent

509-373-586

Purchase Order/Charge Code

Project Title

Sampling Origin

Ice Chest No.

Temp.

2ZP1 MAY 2008

Hanford Site

607

Shinned To (Lab)

Method of Shipment

Bill of Lading/Air Bill No.

TestAmerica Incorporated Richland

Govt. Vehicle

Protocol

Priority: 45 Days

Offsite Property No.

CERCLA

POSSIBLE SAMPLE HAZARDS/REMARKS	
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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

Hold Time

Total Activity Exemption: Yes ☒ No ☐

200 Area Generator Knowledge Information Form applies.

[illegible]

Relinquished By R. D. Julian	Date/Time MAY 28 2008	Received By R. A. Shepard	Date/Time MAY 28 2008	Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By R. A. Shepard	Date/Time 5/28/08 1325	Received By R. A. Shepard	Date/Time 5/28/08 1325		
Relinquished By	Date/Time	Received By	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By	Date/Time

Received By R. A. Shepard	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time MAY 28 2008
Received By <i>[Signature]</i>	Date/Time 52808 1325		
Received By WLANE TAL	Date/Time 52808 1325		

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	W	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

C.O.C. # **108-038-3**

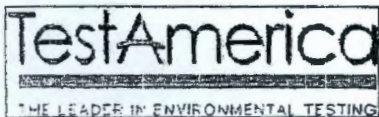
Page 1 of 1

Collector R. D. Julian	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX
SAF No. 108-038	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title 2ZPJ, MAY 2008	HANF-N-506-12	Ice Chest No.	Temp.	
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol CERCLA	Priority: 45 Days	Offsite Property No.		

POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies.	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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[illegible]

Relinquished By R. D. Julian	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time MAY 28 2008	Received By R. A. Shepard	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time MAY 28 2008	Matrix *	
Relinquished By R. A. Shepard	<i>[Signature]</i>	<i>[Signature]</i>	Date/Time 5/28/08 1325	Received By R. A. Shepard	<i>[Signature]</i>	<i>[Signature]</i>	Date/Time 5/28/08 1325	S - Soil SE - Sediment SO - Solid SL - Shale W - Water O - Oil A - Air	DS - Drum Solid DL - Drum Liquid T - Tissue WL - Wine L - Liquid V - Vegetation X - Other
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time	



Sample Check-in List

Date/Time Received: 05 28 08 1325 GM Screen Result .1

Client: P6W SDG #: W05419 NA [] SAF #: I08-038 NA []

Work Order Number: J8E280295 Chain of Custody # I08-038-2,3

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []

6. Number of samples in shipping container: 2

7. Sample holding times exceeded? NA ☒ Yes [] No []

8. Samples have:

_____ Tape

_____ Custody Seals

_____ Hazard Labels

/ Appropriate Sample Labels

9. Samples are:

/ In Good Condition

_____ Broken

_____ Leaking

_____ Have Air Bubbles

(Only for samples requiring no head space.)

10. Sample pH taken? NA [] pH<2 [] pH>2 ☒ pH>9 [] Amount HNO₃ Added None

11. Sample Location, Sample Collector Listed? *

*For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [] No ☒

13. Description of anomalies (include sample numbers): _____

Sample Custodian: RJR Date: 5/28/08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 108-037-92	
				Page 1 of 1	
Collector Roy Sickle		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. 108-037		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title 2UPL MAY 2008		HNF-N-506-13		Ice Chest No. GW-1 Temp.	
Shipped To (Lab) TestAmerica Incorporated Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol SURV		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** **		SPECIAL INSTRUCTIONS 200 Area Generator Knowledge Information Form applies.		Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

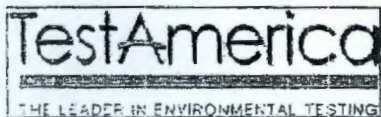
Relinquished By Hoy Sickle	Date/Time 5/28/08	Received By R. A. Shepard	Date/Time 5/28/08	Matrix * S = Soil DS = Drum Solid SF = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By R. A. Shepard	Date/Time 5/28/08 1325	Received By R. A. Shepard	Date/Time 5/28/08 1325	
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By		Received By		
Date/Time		Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		
		Disposed By		Date/Time

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST <i>J8E280299 W05419 Due 07/11/08</i>		C.O.C. # I08-037-37	
Collector Roy Sickle		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. I08-037		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title 2UPL MAY 2008		<i>HNF-N-506-13</i>		Ice Chest No. <i>GW-1</i> Temp.	
Shipped To (Lab) TestAmerica Incorporated Richland		Method of Shipment Govt Vehicle		Bill of Lading/Air Bill No.	
Protocol SURV		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By Roy Sickle	Print <i>[Signature]</i>	Date/Time 830 5/28/08	Received By R. A. Shepard	Print <i>[Signature]</i>	Date/Time 0830 5/28/08	Matrix * S = Soil DS = Drum Solid SF = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By R. A. Shepard	Print <i>[Signature]</i>	Date/Time 1325 5/28/08	Received By R. A. Shepard	Print <i>[Signature]</i>	Date/Time 52808 1325		
Relinquished By	Print	Date/Time	Received By	Print	Date/Time		
Relinquished By	Print	Date/Time	Received By	Print	Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By	Date/Time

Relinquished By Scott E. Homaker 5/27/08	Print <i>[Signature]</i>	Date/Time 5/28/08	Received By R. A. Shepard 5/28/08	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 5/28/08	Matrix * S = Soil DS = Drum Solid SF = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WL = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By R. A. Shepard	<i>[Signature]</i>	Date/Time 5/28/08	Received By <i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	Date/Time 5/28/08	
Relinquished By		Date/Time	Received By			Date/Time	
Relinquished By		Date/Time	Received By			Date/Time	
Relinquished By			Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By	
						Date/Time	



Sample Check-in List

Date/Time Received: 05.28.08 1325 GM Screen Result .1
Client: PBW SDG #: W05419 NA [] SAF #: I08-037 NA []
Work Order Number: J8E280299 Chain of Custody # I08-037-91,38,37,45,92
Shipping Container ID: _____ Air Bill # _____
1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []
6. Number of samples in shipping container: 5
7. Sample holding times exceeded? NA ☒ Yes [] No []
8. Samples have: _____ Hazard Labels _____
_____ Tape _____ Appropriate Sample Labels
_____ Custody Seals
9. Samples are: _____
_____ In Good Condition _____ Leaking _____
_____ Broken _____ Have Air Bubbles _____
(Only for samples requiring no head space.)
10. Sample pH taken? NA [] pH<2 ☒ pH>2 ☒ pH>9 [] Amount HNO₃ Added None
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [] No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [Signature] Date: 52808

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

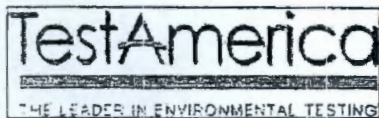
[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 108-036-4	
		J8E290299 W05419 DUE 71408 KN3T7		Page 1 of 1	
Collector Roy Sickle		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. 108-036		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title 100KR41AM(1/2) MAY 2008		HNF-N-506-13		Ice Chest No. SN-1 Temp.	
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol CERCLA		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS 100 Area Generator Knowledge Information Form applies.		Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

Relinquished By	Print Roy Sickle	Sign <i>[Signature]</i>	Date/Time 5/29/08 1410	Received By	Print SCOT HAMAKER	Sign <i>[Signature]</i>	Date/Time 5/29/08 1410	Matrix *	
Relinquished By	Print SCOT HAMAKER	Sign <i>[Signature]</i>	Date/Time 5/29/08 1440	Received By	Print R. R. LANE	Sign <i>[Signature]</i>	Date/Time 5/29/08 1440	S - Soil SE - Sediment SO - Solid SL - Shale W - Water O - Oil A - Air	DS - Drum Solid DL - Drum Liquid T - Tissue WI - Wine LI - Liquid V - Vegetation X - Other
Relinquished By	Date/Time			Received By	Date/Time				
Relinquished By	Date/Time			Received By	Date/Time				
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	



Sample Check-in List

Date/Time Received: 52908 1440 GM Screen Result 0.1K

Client: PLW SDG #: W05419 NA [] SAF #: I08-036 NA []

Work Order Number: J8E290299 Chain of Custody # I08-036-4

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☒ Yes [] No []
8. Samples have:
☒ Tape Hazard Labels
☒ Custody Seals Appropriate Sample Labels
9. Samples are:
☒ In Good Condition
☐ Broken
☐ Leaking
☐ Have Air Bubbles
(Only for samples requiring no head space.)
10. Sample pH taken? NA [] pH<2 [] pH>2 ☒ pH>9 [] Amount HNO₃ Added _____
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [] No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: RJR Date: 52908

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # I08-035-141	
J8F020174 W05419 DUE 71708 KN78H				Page 1 of 1	
Collector R.D. JAMES	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX	
SAF No. I08-035	Sampling Origin Hanford Site	Purchase Order/Charge Code			
Project Title 100HR31AM(1/2) MAY 2008	HNF-N-506-12	Ice Chest No.	Temp.		
Shipped To (Lab) TestAmerica Incorporated Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.			
Protocol CERCLA	Priority: 45 Days	Offsite Property No.			
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS 100 Area Generator Knowledge Information Form applies.		Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

Relinquished By R.D. Jones	Signature <i>[Signature]</i>	Date/Time JUN 02 2008 1635	Received By D.J. Sparks	Signature <i>[Signature]</i>	Date/Time JUN 02 2008 1635	Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Shale WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By D.J. Sparks	Signature <i>[Signature]</i>	Date/Time JUN 17 2008	Received By KB Hulsc	Signature <i>[Signature]</i>	Date/Time 6-2-08 1200		
Relinquished By KB Hulsc	Signature <i>[Signature]</i>	Date/Time 6-2-08 1250	Received By KB Hulsc	Signature <i>[Signature]</i>	Date/Time 6-2-08 1250		
Relinquished By	Signature	Date/Time	Received By	Signature	Date/Time		
Relinquished By	Signature	Date/Time	Received By	Signature	Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By	Date/Time



Sample Check-in List

Date/Time Received: 6208 1250 GM Screen Result 0.1K

Client: PGW SDG #: W05419 NA [] SAF #: I08-035 NA []

Work Order Number: J8F020174 Chain of Custody # I08-035-141

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☒ Yes [] No []
8. Samples have:
____ Tape
☒ Custody Seals
____ Hazard Labels
☒ Appropriate Sample Labels
9. Samples are:
☒ In Good Condition
____ Broken
____ Leaking
____ Have Air Bubbles
(Only for samples requiring no head space.)
10. Sample pH taken? NA [] pH < 2 [] pH > 2 ☒ pH > 9 [] Amount HNO₃ Added _____
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [] No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian:  Date: 6208

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



Sample Check-in List

Date/Time Received: 6308 1425 GM Screen Result 0.1K
Client: PCW SDG #: W05419 NA [] SAF #: I08-035 NA []
Work Order Number: J8F030292 Chain of Custody # I08-035-104, 115

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA ☒ Yes [] No []
8. Samples have:
____ Tape Hazard Labels
☒ Custody Seals ☒ Appropriate Sample Labels
9. Samples are:
____ In Good Condition
☒ Broken
____ Leaking
____ Have Air Bubbles
(Only for samples requiring no head space.)
10. Sample pH taken? NA [] pH<2 [] pH>2 ☒ pH>9 [] Amount HNO₃ Added _____
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [] No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [Signature] Date: 6308

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

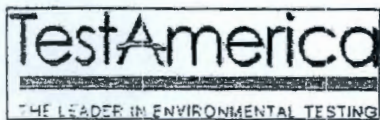
[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 108-038-30	
		J8F040162 W05419 DUE 71808 KPAG0		Page 1 of 1	
Collector D. R. Williamson		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. 108-038		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title 22P1 MAY 2008		INF-N-506-16		Ice Chest No. ERC-1 Temp.	
Shipped To (Lab) TestAmerica Incorporated Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol CERCLA		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** **		SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies.			
		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			

[illegible]

Relinquished By D. R. Williamson	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 6-3-08 1230	Received By RS Hulse	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 6-3-08 1230	Matrix *	
Relinquished By RS Hulse	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 6-3-08 1350	Received By RS Hulse	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 6-3-08 1350	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	



Sample Check-in List

Date/Time Received: 6308 1350 GM Screen Result 0.1K

Client: PGW SDG #: W05419 NA [] SAF #: I08-038 NA []

Work Order Number: J8F040162 Chain of Custody # I08-038-30-31

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []

6. Number of samples in shipping container: 2

7. Sample holding times exceeded? NA ☒ Yes [] No []

8. Samples have:

 Tape

 Custody Seals

 Hazard Labels

 Appropriate Sample Labels

9. Samples are:

 In Good Condition

 Broken

 Leaking

 Have Air Bubbles

(Only for samples requiring no head space.)

10. Sample pH taken? NA [] pH < 2 ☒ pH > 2 [] pH > 9 [] Amount HNO₃ Added _____

11. Sample Location, Sample Collector Listed? *

*For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [] No ☒

13. Description of anomalies (include sample numbers): _____

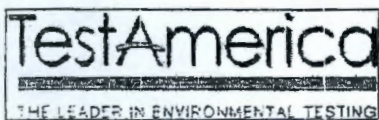
Sample Custodian: [Signature] Date: 6308

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



Sample Check-in List

Date/Time Received: 6308 1425 GM Screen Result 0.1K

Client: PGW SDG #: W05419 NA [] SAF #: W08-005 NA []

Work Order Number: J8F040165 Chain of Custody # W08-005-304

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? NA ☒ Yes [] No []

8. Samples have:

☐ Tape
☒ Custody Seals

☐ Hazard Labels
☒ Appropriate Sample Labels

9. Samples are:

☒ In Good Condition
☐ Broken

☐ Leaking
☐ Have Air Bubbles
(Only for samples requiring no head space.)

10. Sample pH taken? NA [] pH<2 [] pH>2 ☒ pH>9 [] Amount HNO₃ Added _____

11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [] No ☒

13. Description of anomalies (include sample numbers): _____

Sample Custodian:  Date: 6308

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

Relinquished By R. D. Julian	Print <i>R. D. Julian</i>	Sign <i>[Signature]</i>	Date/Time JUN 03 2008 1425	Received By R. R. WILANE TAL	Print <i>R. R. WILANE TAL</i>	Sign <i>[Signature]</i>	Date/Time JUN 03 2008 1425	Matrix *	
Relinquished By	Date/Time	Received By	Date/Time					S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air	DS - Drum Solid DL - Drum Liquid T - Tissue WL - Wine LI - Liquid V - Vegetation X - Other
Relinquished By	Date/Time	Received By	Date/Time						
Relinquished By	Date/Time	Received By	Date/Time						
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time		



Sample Check-in List

Date/Time Received: 6308 1425 GM Screen Result 0.1K

Client: PAW SDG #: W05419 NA [] SAF #: 108-035 NA []

Work Order Number: JBFO40186 Chain of Custody # 108-035-115

Shipping Container ID: N/A Air Bill # N/A

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? NA ☒ Yes [] No []

8. Samples have:

 Tape
 Custody Seals

 Hazard Labels
 Appropriate Sample Labels

9. Samples are:

 In Good Condition
 Broken

 Leaking
 Have Air Bubbles
(Only for samples requiring no head space.)

10. Sample pH taken? NA [] pH < 2 [] pH > 2 ☒ pH > 9 [] Amount HNO₃ Added _____

11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [] No ☒

13. Description of anomalies (include sample numbers): _____

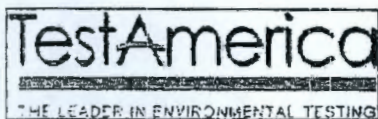
Sample Custodian: [Signature] Date: 6308

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



Sample Check-in List

Date/Time Received: 6408 1350 GM Screen Result 0.1K

Client: PGW SDG #: W05419 NA [] SAF #: 508-003 NA []

Work Order Number: J8F050162 Chain of Custody # 508-003-176

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? NA ☒ Yes [] No []

8. Samples have:

☒ Tape
☒ Custody Seals

☒ Hazard Labels
☒ Appropriate Sample Labels

9. Samples are:

☒ In Good Condition
☐ Broken

☐ Leaking
☐ Have Air Bubbles
(Only for samples requiring no head space.)

10. Sample pH taken? NA [] pH < 2 ☒ pH > 2 [] pH > 9 [] Amount HNO₃ Added _____

11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [] No ☒

13. Description of anomalies (include sample numbers): _____

Sample Custodian:  Date: 6408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



Sample Check-in List

Date/Time Received: 6408 1350 GM Screen Result 0.1K

Client: PAW SDG #: W05419 NA [] SAF #: I08-037 NA []

Work Order Number: J8F050164 Chain of Custody # I08-037

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☒ Yes [] No []
8. Samples have:
____ Tape _____ Hazard Labels
☒ Custody Seals ☒ Appropriate Sample Labels
9. Samples are:
☒ In Good Condition _____ Leaking
____ Broken _____ Have Air Bubbles
(Only for samples requiring no head space.)
10. Sample pH taken? NA [] pH < 2 ☒ pH > 2 ☒ pH > 9 [] Amount HNO₃ Added _____
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [] No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian:  Date: 6408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA	FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. #	S08-001-162
					Page 1 of 1
	J8F050177 W05419 DUE 71808 KPEX6				
Collector	D. Woehle		Contact/Requester	Steve Trent	
SAF No.	S08-001		Sampling Origin	Hanford Site	
Project Title	SURV JANUARY 2008		Ice Chest No.	Temp.	
Shipped To (Lab)	TestAmerica Incorporated, Richland		Method of Shipment	Goyt. Vehicle	
Protocol	SURV		Priority:	45 Days	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Site-Wide Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RTP0		W	6-4-08	1117	1x20-mL P	Activity Scan	None
B1RTP0		W	I	I	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1) ✓	HNO3 to pH <2
B1RTP0		W	I	I	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1) ✓	None
B1RTP0		W	I	I	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2) ✓	HNO3 to pH <2
B1RTP0		W	I	I	1x4000-mL G/P	GAMMALL_GS: List-1 (9) ✓	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix * S = Soil DS = Drum Solid SF = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
D. Woehle		<i>[Signature]</i>	JUN 04 2008 1350	<i>[Signature]</i>	LANE TAL		JUN 04 2008 1350		
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



Sample Check-in List

Date/Time Received: 6408 1350 GM Screen Result 0.1K

Client: PGW SDG #: W05419 NA [] SAF #: 508-001 NA []

Work Order Number: J8F050177 Chain of Custody # 508-001

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes [☒] No []
2. Custody Seals dated and signed? NA [] Yes [☒] No []
3. Chain of Custody record present? NA [] Yes [☒] No []
4. Cooler Temperature: _____ NA [☒] 5. Vermiculite/packing materials is NA [☒] Wet [] Dry []

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? NA [☒] Yes [] No []

8. Samples have:

 Tape
 Custody Seals

 Hazard Labels
 Appropriate Sample Labels

9. Samples are:

 In Good Condition
 Broken

 Leaking
 Have Air Bubbles
(Only for samples requiring no head space.)

10. Sample pH taken? NA [] pH < 2 [☒] pH > 2 [☒] pH > 9 [] Amount HNO₃ Added _____

11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [] No [☒]

13. Description of anomalies (include sample numbers): _____

Sample Custodian:  Date: 6408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

6/18/2008 7:29:02 AM

Sample Preparation/Analysis

Balance Id:1120373922

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab7Y Uiso PrpRC5016/5086, SepRC5067(5039)
SR Uranium-234,235,238 by Alpha Spec

Pipet #:

AnalyDueDate: 07/21/2008

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Batch: 8164623 WATER pCi/L PM, Quote: SS, 57671
SEQ Batch, Test: None All Tests: 8164617 AWTa, 8164618 BNTB, 8164621 CYTM, 8164622 KOXW, 8164623 7YSR, 8164624 5SS3,

Prep Tech: WoodT

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KN1JT-1-AG			200.01g,in	200.01g	UITS19833	500				
J8E280299-1-SAMP					05/19/08,pd 06/15/01,r					
05/27/2008 09:57			AmtRec: 20ML,6XLP,3X4LP	#Containers: 10				Scr: Alpha: -1.54E-03 uCi/Sa	Beta: 2.66E-03 uCi/Sa	
2 KN1JT-1-AJ-X			200.01g,in	200.01g	UITS19832					
J8E280299-1-DUP					05/19/08,pd 06/15/01,r					
05/27/2008 09:57			AmtRec: 20ML,6XLP,3X4LP	#Containers: 10				Scr: Alpha: -1.54E-03 uCi/Sa	Beta: 2.66E-03 uCi/Sa	
3 KN1JX-1-AG			200.03g,in	200.03g	UITS19867					
J8E280299-2-SAMP					05/20/08,pd 06/15/01,r					
05/27/2008 11:13			AmtRec: 20ML,6XLP,3X4LP	#Containers: 10				Scr: Alpha: 4.10E-04 uCi/Sa	Beta: -1.24E-04 uCi/Sa	
4 KPEV3-1-AG			200.03g,in	200.03g	UITS19868					
J8F050164-1-SAMP					05/20/08,pd 06/15/01,r					
06/04/2008 09:30			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10				Scr: Alpha: 1.30E-03 uCi/Sa	Beta: -1.04E-03 uCi/Sa	
5 KPVM4-1-AA-B			200.04g,in	200.04g	UITS19869					
J8F120000-623-BLK					05/20/08,pd 06/15/01,r					
05/27/2008 09:57			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	
6 KPVM4-1-AC-C			200.05g,in	200.05g	UISG1652					
J8F120000-623-LCS					04/23/08,pd 06/15/01,r					
05/27/2008 09:57			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	

TESTAMERICA

6/18/2008 7:29:04 AM

Sample Preparation/Analysis

Balance Id:1120373922

7Y Ulso PrpRC5016/5086, SepRC5067(5039)

Pipet #:

SR Uranium-234,235,238 by Alpha Spec

SI CLIENT: HANFORD

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8164623

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT



Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: 14/42.0 35.0 6/18/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KN1JT1AG-SAMP Constituent List:

U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KPV41AA-BLK:											
U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KPV41AC-LCS:											
U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Uranium	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

KN1JT1AG-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPV41AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPV41AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By

Date:

TAL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

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ISV - Insufficient Volume for Analysis

WO Cnt: 6
Prep_SamplePrep v4.8

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6/27/2008 10:37:27 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/28/2007, 7/2/2008, Batch: '8164623', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8164623				
AC	Rev1C	WoodT	6/18/2008 7:04:54	
SC		wagarr	IsBatched	6/13/2008 8:19:38 AM
SC		WcodT	InPrep	6/18/2008 7:04:54 AM
SC		WcodT	Prep1C	6/18/2008 7:29:27 AM
SC		AshworthA	Prep2C	6/19/2008 11:36:14 AM
SC		AshworthA	Sep1C	6/19/2008 3:02:46 PM
SC		AshworthA	Sep2C	6/20/2008 12:36:02 PM
SC		DAWKINSO	CalcC	6/20/2008 9:01:27 PM
SC		whelands	Rev1C	6/27/2008 10:37:21 AM
AC		WoodT	6/18/2008 7:29:27	
AC		AshworthA	6/19/2008 11:36:14	
AC		AshworthA	6/19/2008 3:02:46 PM	
AC		AshworthA	6/20/2008 12:36:02	
AC		DAWKINSO	6/20/2008 9:01:27 PM	
AC		whelands	6/27/2008 10:37:21	

AC: Accepting Entry; SC: Status Change

TAL Richland
Richland Wa.

Page 1

Grp Rec Cnt: 7
ICOCFractions v4.8.33

TESTAMERICA

6/24/2008 3:49:51 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabKO Np-237 PrpRC5086, SepRC5064(5003)
XW Neptunium-237 with tracer by alpha spec
51 CLIENT: HANFORDPipet #: *DRM*AnalyDueDate: 07/21/2008 *WDS419*Sep1 DT/Tm Tech: *6/26/08 10:45 AM*Batch: 8164622 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

Prep Tech: WoodT,HarrisD

Work Ord, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KN1JT-1-AA			200.00g,in	200.00g	NPTA7080							
J8E280299-1-SAMP					05/15/08,pd 06/01/01,r							
05/27/2008 09:57			AmtRec: 20ML,6XLP,3X4LP	#Containers: 10						Scr: Alpha: -1.54E-03 uCi/Sa	Beta: 2.66E-03 uCi/Sa	
2 KN1JX-1-AA			200.00g,in	200.00g	NPTA7081							
J8E280299-2-SAMP					05/15/08,pd 06/01/01,r							
05/27/2008 11:13			AmtRec: 20ML,6XLP,3X4LP	#Containers: 10						Scr: Alpha: 4.10E-04 uCi/Sa	Beta: -1.24E-04 uCi/Sa	
3 KN1JX-1-AH-X			199.90g,in	199.90g	NPTA7074							
J8E280299-2-DUP					05/15/08,pd 06/01/01,r							
05/27/2008 11:13			AmtRec: 20ML,6XLP,3X4LP	#Containers: 10						Scr: Alpha: 4.10E-04 uCi/Sa	Beta: -1.24E-04 uCi/Sa	
4 KPEV3-1-AA			200.20g,in	200.20g	NPTA7082							
J8F050164-1-SAMP					06/24/08,pd 06/01/01,r							
06/04/2008 09:30			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10						Scr: Alpha: 1.30E-03 uCi/Sa	Beta: -1.04E-03 uCi/Sa	
5 KPVM3-1-AA-B			200.10g,in	200.10g	NPTA7083							
J8F120000-622-BLK					06/24/08,pd 06/01/01,r							
05/27/2008 11:13			AmtRec:	#Containers: 1						Scr: Alpha:	Beta:	
6 KPVM3-1-AC-C			200.00g,in	200.00g	NPSE0469							
J8F120000-622-LCS					05/15/08,pd 06/01/01,r							
05/27/2008 11:13			AmtRec:	#Containers: 1						Scr: Alpha:	Beta:	

TESTAMERICA

6/24/2008 3:49:53 PM

Sample Preparation/Analysis

Balance Id:1120482733

KO Np-237 PrpRC5086, SepRC5064(5003)
XW Neptunium-237 with tracer by alpha spec
SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech: _____

Batch: 8164622
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech: _____

Prep Tech: ,HarrisD



Work Ord, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

pH 2.0 bottle 124/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KN1JT1AA-SAMP Constituent List:

Np-237 RDL:0.6 pCi/L LCL: UCL: RPD:
KPVM31AA-BLK:
Np-237 RDL:0.6 pCi/L LCL: UCL: RPD:
KPVM31AC-LCS:

KN1JT1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KPVM31AA-BLK:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KPVM31AC-LCS:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

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TAL Richland
Richland Wa.

Key: In - Initial Amt, fl - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 6
Prep_SamplePrep v4.8

6/27/2008 4:00:17 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/28/2007, 7/2/2008, Batch: '8164622', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8164622				
AC	Rev1C	HarrisD	6/24/2008 3:44:56 PM	
SC		wagarr	IsBatched: 6/13/2008 8:19:38 AM	ICOC_RADCALC v4.8.32
SC		HarrisD	InPrep 6/24/2008 3:44:56 PM	RL-PRP-004 REVISION 0
SC		HarrisD	Prep1C 6/24/2008 3:49:52 PM	RL-PRP-004 REVISION 0
SC		ManisD	Sep2C 6/26/2008 5:34:54 PM	RL-ALP-016 REV 0
SC		DAWKINSO	InCnt1 6/26/2008 6:33:31 PM	RL-CI-008 REVISION 0
SC		ClarkR	CalcC 6/27/2008 12:17:36 PM	RL-CI-008 REVISION 0
SC		whelands	Rev1C 6/27/2008 4:00:10 PM	RICH-RC-0002 REV 8
AC		HarrisD	6/24/2008 3:49:52 PM	
AC		ManisD	6/26/2008 5:34:54 PM	
AC		DAWKINSO	6/26/2008 6:33:31 PM	
AC		ClarkR	6/27/2008 12:17:36	
AC		whelands	6/27/2008 4:00:10 PM	

AC: Accepting Entry, SC: Status Change

TAL Richland
Richland Wa.

Page 1

Grp Rec Cnt: 6
ICOCFractions v4.8.33

6/20/2008 3:52:31 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014

S7 Gross Alpha by GPC using Am-241 curve

51 CLIENT: HANFORD

Pipet #: 245AnalyDueDate: 07/21/2008 0005419

Sep1 DT/Tm Tech:

Batch: 8164615 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD/Bach2

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPEVW-1-AA J8F050162-1-SAMP 06/04/2008 13:19	142.90g,in			1.5	34.4	100	11C	1607	6/26/08	
AmRec: VIAL20,500MLP,LP #Containers: 3 Scr: Alpha: 2.27E-04 uCi/Sa Beta: -4.14E-06 uCi/Sa										
2 KPEVW-1-AE-X J8F050162-1-DUP 06/04/2008 13:19	142.70g,in				35.7		11A	1826	6/26/08	
AmRec: VIAL20,500MLP,LP #Containers: 3 Scr: Alpha: 2.27E-04 uCi/Sa Beta: -4.14E-06 uCi/Sa										
3 KPEX6-1-AA J8F050177-1-SAMP 06/04/2008 11:17	166.80g,in				33.8	50	10F	1517	6/26/08	
AmRec: VIAL20,4XLP,3X4LP #Containers: 8 Scr: Alpha: -3.16E-04 uCi/Sa Beta: 4.59E-03 uCi/Sa										
4 KPVMT-1-AA-B J8F120000-615-BLK 06/04/2008 13:19	200.20g,in				1.0	100	10F	1717	6/26/08	
AmRec: #Containers: 1 Scr: Alpha: Beta:										
5 KPVMT-1-AC-C J8F120000-615-LCS 06/04/2008 13:19	200.30g,in		asd4496 05/27/08,pd		1.0		10E			
AmRec: #Containers: 1 Scr: Alpha: Beta:										

Comments:

pH 2.0 August reduced due to it screens 06/20/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS, 57671

KPEVW1AA-SAMP Constituent List:

ALPHA RDL:3 pCi/L LCL: UCL: RPD:

TAL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 5
Prep_SamplePrep v4.8.

TESTAMERICA

6/20/2008 3:52:32 PM

Sample Preparation/Analysis

Balance Id:1120482733

AZ Gross Alpha PrpRC5014

Pipet #:

S7 Gross Alpha by GPC using Am-241 curve

51 CLIENT: HANFORD

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8164615

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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KPVMT1AA-BLK:

ALPHA RDL:3

pCi/L

LCL:

UCL:

RPD:

KPVMT1AC-LCS:

Am-241 RDL:

pCi/L

LCL:70

UCL:130

RPD:20

KPEVW1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVMT1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVMT1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By

Date:

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TAL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

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ISV - Insufficient Volume for Analysis

WO Cnt: 5
Prep_SamplePrep v4.8

6/30/2008 9:09:23 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/1/2007, 7/5/2008, Batch: '8164615', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8164615				
AC	Rev1C	HarrisD	6/20/2008 3:49:51 PM	
SC		wagarr	IsBatched	6/13/2008 8:19:38 AM
SC		HarrisD	InPrep	6/20/2008 3:49:51 PM
SC		HarrisD	Prep1C	6/20/2008 3:52:33 PM
SC		BockJ	InPrep2	6/25/2008 7:18:12 AM
SC		BockJ	Prep2C	6/26/2008 2:08:18 PM
SC		BlackCL	InCnt1	6/26/2008 2:12:26 PM
SC		DAWKINSO	CalcC	6/26/2008 11:00:08 PM
SC		antonsonl	Rev1C	6/30/2008 9:09:13 AM
AC		HarrisD	6/20/2008 3:52:33 PM	
AC		BockJ	6/25/2008 7:18:12	
AC		BockJ	6/26/2008 2:08:18 PM	
AC		BlackCL	6/26/2008 2:12:26 PM	
AC		DAWKINSO	6/26/2008 11:00:08	
AC		antonsonl	6/30/2008 9:09:13	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt:7

ICOCFractions v4.8.33

TESTAMERICA

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6/20/2008 3:48:49 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National LabBC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
51 CLIENT: HANFORDPipet #: *2/5*AnalyDueDate: 07/21/2008 *W05419*

Batch: 8164616 WATER pCi/L

PM, Quote: SS , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD/*Back 2*

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPEVW-1-AC	200.10g,in			1.5		100	27B	1958		<i>6/26/08</i>
J8F050162-1-SAMP						<i>107.9</i>				
06/04/2008 13:19		AmtRec: VIAL20,500MLP,LP	#Containers: 3					Scr: Alpha: 2.27E-04 uCi/Sa	Beta: 4.14E-06 uCi/Sa	
2 KPEX6-1-AC	200.30g,in						27D			
J8F050177-1-SAMP						<i>66.4</i>				
06/04/2008 11:17		AmtRec: VIAL20,4XLP,3X4LP	#Containers: 8					Scr: Alpha: -3.16E-04 uCi/Sa	Beta: 4.59E-03 uCi/Sa	
3 KPEX6-1-AG-X	200.20g,in									
J8F050177-1-DUP						<i>65.5</i>				
06/04/2008 11:17		AmtRec: VIAL20,4XLP,3X4LP	#Containers: 8					Scr: Alpha: -3.16E-04 uCi/Sa	Beta: 4.59E-03 uCi/Sa	
4 KPV MV-1-AA-B	200.20g,in						31B			
J8F120000-616-BLK						<i>0.3</i>				
06/04/2008 11:17		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	
5 KPV MV-1-AC-C	200.30g,in						31D			
J8F120000-616-LCS		besb3263				<i>0.2</i>				
06/04/2008 11:17		05/27/08,pd	#Containers: 1					Scr: Alpha:	Beta:	

Comments:

OK 20 Att 6/24/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPEVW1AC-SAMP Constituent List:

BETA RDL:4 pCi/L LCL: UCL: RPD:

TAL Richland Key: In - Initial Amt, fi - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 5
Prep_SamplePrep v4.8.

6/20/2008 3:48:50 PM

Sample Preparation/Analysis

Balance Id:1120482733

BC Gross Beta PrpRC5014

Pipet #:

S8 Gross Beta by GPC using Sr/Y-90 curve

Sep1 DT/Tm Tech:

AnalyDueDate: 07/21/2008

5I CLIENT: HANFORD

Batch: 8164616

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	--------------	--------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

KPVMV1AA-BLK:

BETA RDL:4 pCi/L LCL: UCL: RPD:

KPVMV1AC-LCS:

Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20

KPEVW1AC-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVMV1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVMV1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/30/2008 9:07:34 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/1/2007, 7/5/2008, Batch: '8164616', User: *ALL Order By DateTimeAccepting

Batch	Work Ord	CurStatus	Accepting	Comments
8164616				
AC	Rev1C	HarrisD	6/20/2008 3:45:50 PM	
SC		wagarr	IsBatched	6/13/2008 8:19:38 AM
SC		HarrisD	InPrep	6/20/2008 3:45:50 PM
SC		HarrisD	Prep1C	6/20/2008 3:48:51 PM
SC		BockJ	InPrep2	6/25/2008 7:18:05 AM
SC		BockJ	Prep2C	6/26/2008 2:09:05 PM
SC		BlackCL	InCnt1	6/26/2008 2:12:52 PM
SC		DAWKINSO	CalcC	6/26/2008 11:00:31 PM
SC		antonsonl	Rev1C	6/30/2008 9:07:29 AM
AC		HarrisD	6/20/2008 3:48:51 PM	
AC		BockJ	6/25/2008 7:18:05	
AC		BockJ	6/26/2008 2:09:05 PM	
AC		BlackCL	6/26/2008 2:12:52 PM	
AC		DAWKINSO	6/26/2008 11:00:31	
AC		antonsonl	6/30/2008 9:07:29	

ICOC_RADCALC v4.8.32
 RL-PRP-004 REVISION 0
 RL-PRP-004 REVISION 0
 RL-GPC-001 REVISION 0
 RL-GPC-001 REVISION 0
 RL-CI-006 REVISION 0
 RL-CI-006 REVISION 0
 RICH-RC-0002 REV 8

AC: Accepting Entry; SC: Status Change

TAL Richland
 Richland Wa.

6/19/2008 7:52:28 AM

Sample Preparation/Analysis

Balance Id:1120373922

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabCL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
51 CLIENT: HANFORD

Pipet #:

DRM

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech: 6/23/08 15:51:0

Batch: 8164619 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech: 6-30-08 7-1-08 1013

Prep Tech: WoodT

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPEX6-1-AF J8F050177-1-SAMP YTA18954 Ex:4/29/2009	1000.08g,in	SRTB16237	05/21/08,pd 05/22/07	1.999 2.0160 1.5	100	9"	100	9"	1051	6/23/08 PD	
06/04/2008 11:17		AmtRec: VIAL20,4XLP,3X4LP	#Containers: 8					Scr: Alpha: -3.16E-04 uCi/Sa	Beta: 4.59E-03 uCi/Sa		
2 KPEX6-1-AH-X J8F050177-1-DUP YTA18955 Ex:4/29/2009	1000.20g,in	SRTB16238	05/21/08,pd 05/22/07	0.9816				3"	1651	6/23/08 PD	
06/04/2008 11:17		AmtRec: VIAL20,4XLP,3X4LP	#Containers: 8					Scr: Alpha: -3.16E-04 uCi/Sa	Beta: 4.59E-03 uCi/Sa		
3 KPVM0-1-AA-B J8F120000-619-BLK YTA18956 Ex:4/29/2009	1000.66g,in	SRTB16239	05/21/08,pd 05/22/07	1.968 2.0132 = .9865				9"	1736	6/23/08 PD	
06/04/2008 11:17		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:		
4 KPVM0-1-AC-C J8F120000-619-LCS YTA18957 Ex:4/29/2009	1000.02g,in	SRSG1486	06/18/08,pd 07/23/08	0.9403				3"	1737	6/23/08 PD	
06/04/2008 11:17		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:		

6/19/2008 7:52:29 AM

Sample Preparation/Analysis

Balance Id:1120373922

CL Sr-90 Prp/SepRC5006(5071)

TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth

SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech: _____

Batch: 8164619

pCi/L

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

pH < 2.0 6/19/08 JGN

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPEX61AF-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20
KPVM01AA-BLK:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:
KPVM01AC-LCS:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

KPEX61AF-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPVM01AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPVM01AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____

Date: _____

7/10/2008 10:09:46 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/11/2007, 7/15/2008, Batch: '8164619', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8164619				
AC	Rev1C	WoodT	6/19/2008 7:42:08	
SC		wagarr	IsBatched	6/13/2008 8:19:38 AM
SC		WoodT	InPrep	6/19/2008 7:42:08 AM
SC		WoodT	Prep1C	6/19/2008 7:52:54 AM
SC		ManisD	InSep1	6/20/2008 9:42:22 AM
SC		DAWKINSO	InCnt1	6/23/2008 4:24:16 PM
SC		DAWKINSO	Cnt1C	6/23/2008 8:07:32 PM
SC		ManisD	InSep2	6/24/2008 11:05:26 AM
SC		McDowellD	Sep1C	7/1/2008 3:49:31 PM
SC		DAWKINSO	InCnt2	7/1/2008 4:27:57 PM
SC		BlackCL	CalcC	7/3/2008 7:09:34 AM
SC		nortonj	Rev1C	7/10/2008 10:09:41 AM
AC		WoodT	6/19/2008 7:52:54	ICOC_RADCALC v4.8.32
AC		ManisD	6/20/2008 9:42:22	RICH-RC-5016 Revision 7
AC		DAWKINSO	6/23/2008 4:24:16 PM	RICH-RC-5016 REVISION 7
AC		DAWKINSO	6/23/2008 8:07:32 PM	RL-GPC-003 REV 0
AC		ManisD	6/24/2008 11:05:26	RL-CI-007 REVISION 0
AC		McDowellD	7/1/2008 3:49:31 PM	RL-CI-007 REVISION 0
AC		DAWKINSO	7/1/2008 4:27:57 PM	RL-GPC-004 REV 0
AC		BlackCL	7/3/2008 7:09:34 AM	RL-GPC-004 REV 0
AC		nortonj	7/10/2008 10:09:41	RL-CI-006 REVISION 0
				RL-CI-006 REVISION 0
				RICH-RC-0002 REV 8

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 10

ICOCFractions v4.8.33

6/18/2008 8:07:59 AM

Sample Preparation/Analysis

Balance Id:1120373922

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabAW Gamma PrpRC5017
TA Gamma by HPGE
SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8164617 WATER pCi/L PM, Quote: SS, 57671
SEQ Batch, Test: None All Tests: 8164617 AWTB, 8164618 BNTB, 8164621 CYTM, 8164622 KOXW, 8164623 7YSR, 8164624 5SS3,

Sep2 DT/Tm Tech:

Prep Tech: WoodT Back 2

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KN1JT-1-AD J8E280299-1-SAMP 05/27/2008 09:57 AmtRec: 20ML,6XLP,3X4LP #Containers: 10	2000.01g,in							Scr: Alpha: -1.54E-03 uCi/Sa Beta: 2.66E-03 uCi/Sa		60ms 1102 6/18/08
2 KN1JX-1-AD J8E280299-2-SAMP 05/27/2008 11:13 AmtRec: 20ML,6XLP,3X4LP #Containers: 10	2000.09g,in							Scr: Alpha: 4.10E-04 uCi/Sa Beta: -1.24E-04 uCi/Sa		65 1102
3 KPEV3-1-AD J8F050164-1-SAMP 06/04/2008 09:30 AmtRec: VIAL20,6XLP,3X4LP #Containers: 10	1951.01g,in							Scr: Alpha: 1.30E-03 uCi/Sa Beta: -1.04E-03 uCi/Sa		611 1103
4 KPEV3-1-AH-X J8F050164-1-DUP 06/04/2008 09:30 AmtRec: VIAL20,6XLP,3X4LP #Containers: 10	1949.67g,in							Scr: Alpha: 1.30E-03 uCi/Sa Beta: -1.04E-03 uCi/Sa		614 1104
5 KPEX6-1-AD J8F050177-1-SAMP 06/04/2008 11:17 AmtRec: VIAL20,4XLP,3X4LP #Containers: 8	2000.86g,in							Scr: Alpha: -3.16E-04 uCi/Sa Beta: 4.59E-03 uCi/Sa		67 1104
6 KPMW-1-AA-B J8F120000-617-BLK 06/04/2008 09:30 AmtRec: #Containers: 1	2000.01g,in							Scr: Alpha: Beta:		610 1104
7 KPMW-1-AC-C J8F120000-617-LCS 06/04/2008 09:30 AmtRec: #Containers: 1	2000.71g,in	QCAG1483 04/23/08,pd 06/11/08						Scr: Alpha: Beta:		66 1105

6/18/2008 8:08:00 AM

Sample Preparation/Analysis

Balance Id:1120373922

AW Gamma PrpRC5017

Pipet #:

TA Gamma by HPGE

AnalyDueDate: 07/21/2008

SI CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 8164617

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: 4/20/08 13V

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KN1JT1AD-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

KPVW1AA-BLK:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

KPVW1AC-LCS:

Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						

KN1JT1AD-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPVW1AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPVW1AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By

Date:

6/30/2008 9:05:38 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/1/2007, 7/5/2008, Batch: '8164617', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8164617				
AC	Rev1C	WoodT	6/18/2008 7:44:35	
SC		wagarr	IsBatched	6/13/2008 8:19:38 AM
SC		WoodT	InPrep	6/18/2008 7:44:35 AM
SC		WoodT	Prep1C	6/18/2008 8:03:30 AM
SC		BockJ	InPrep2	6/18/2008 10:09:05 AM
SC		BlackCL	InCnt1	6/20/2008 7:01:54 AM
SC		BockJ	Prep2C	6/20/2008 9:53:26 AM
SC		ClarkR	CalcC	6/20/2008 12:19:48 PM
SC		antonsonl	Rev1C	6/30/2008 9:05:06 AM
AC		WoodT		
AC		BockJ		
AC		BlackCL		
AC		BockJ		
AC		ClarkR		
AC		antonsonl		

ICOC_RADCALC v4.8.32
 RICH RC 5017 REVISION 6
 RICH RC 5017 REVISION 6
 RICH-RC-5017 REVISION 6
 RL-CI-007 REVISION 0
 RL-GAM-001 REVISION 0
 RL-CI-007 REVISION 0
 RICH-RC-0002 REV 8

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.33

TESTAMERICA

129

TESTAMERICA

6/24/2008 1:43:36 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8164618 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KNTWQ-1-AA J8E230328-1-SAMP 05/20/2008 13:22	3864.50g,in	ITA7354 06/16/08								
				36.8	100	L4	607			
				AmtRec: VIAL20,2X4LP		#Containers: 3		Scr:	Alpha: -4.01E-04 uCi/Sa	Beta: -2.32E-04 uCi/Sa
2 KNTWQ-1-AC-X J8E230328-1-DUP 05/20/2008 13:22	3863.70g,in	ITA7355 06/16/08								
				35.2		L5	1807			
				AmtRec: VIAL20,2X4LP		#Containers: 3		Scr:	Alpha: -4.01E-04 uCi/Sa	Beta: -2.32E-04 uCi/Sa
3 KNTW6-1-AA J8E230328-2-SAMP 05/20/2008 12:50	3852.60g,in	ITA7356 06/16/08								
				34.1		L2	1807			
				AmtRec: VIAL20,2X4LP		#Containers: 3		Scr:	Alpha: -1.13E-03 uCi/Sa	Beta: 5.63E-04 uCi/Sa
4 KN1HA-1-AA J8E280293-1-SAMP 05/27/2008 14:01	3893.70g,in	ITA7357 06/16/08								
				33.8		L2	1956			1/2/10 800
				AmtRec: 20ML2X4LP		#Containers: 3		Scr:	Alpha: -5.16E-04 uCi/Sa	Beta: 5.63E-04 uCi/Sa
5 KN1HP-1-AA J8E280295-1-SAMP 05/27/2008 12:10	3756.80g,in	ITA7358 06/16/08								
				34.0		L4	1958			
				AmtRec: 20ML2X4LP		#Containers: 3		Scr:	Alpha: -7.38E-05 uCi/Sa	Beta: 1.45E-03 uCi/Sa
6 KN1HQ-1-AA J8E280295-2-SAMP 05/27/2008 12:10	3784.30g,in	ITA7359 06/16/08								
				34.5		L5	1958			
				AmtRec: 20ML2X4LP		#Containers: 3		Scr:	Alpha: -5.24E-04 uCi/Sa	Beta: 1.71E-03 uCi/Sa
7 KN1JT-1-AE J8E280299-1-SAMP 05/27/2008 09:57	3857.90g,in	ITA7361 06/16/08								
				33.8		L2	2141			
				AmtRec: 20ML6XLP,3X4LP		#Containers: 10		Scr:	Alpha: -1.54E-03 uCi/Sa	Beta: 2.66E-03 uCi/Sa

TESTAMERICA

6/24/2008 1:43:37 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

SI CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8164618 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KN1JX-1-AE J8E280299-2-SAMP 05/27/2008 11:13 AmtRec: 20ML,6XLP,3X4LP #Containers: 10	3884.60g,in	ITA7360 06/16/08		34.7	100	L4	2143	7/2/08 00	Alpha: 4.10E-04 uCi/Sa Beta: -1.24E-04 uCi/Sa	
9 KN1KG-1-AA J8E280299-3-SAMP 05/27/2008 13:18 AmtRec: 20ML,4LP #Containers: 3	3881.80g,in	ITA7362 06/16/08		34.0		L5			Alpha: -3.04E-04 uCi/Sa Beta: -4.97E-04 uCi/Sa	
10 KN1KP-1-AA J8E280299-4-SAMP 05/27/2008 13:18 AmtRec: 20ML,4LP #Containers: 3	3892.70g,in	ITA7363 06/16/08		33.7		L2	2836		Alpha: -1.20E-03 uCi/Sa Beta: 1.80E-03 uCi/Sa	
11 KN1KX-1-AA J8E280299-5-SAMP 05/27/2008 14:40 AmtRec: 20ML,4LP #Containers: 3	3881.60g,in	ITA7364 06/16/08		35.1		L4	2338		Alpha: -4.36E-04 uCi/Sa Beta: 8.28E-04 uCi/Sa	
12 KPA60-1-AA J8F040162-1-SAMP 06/02/2008 09:49 AmtRec: VIAL20,2X4LP #Containers: 3	3901.00g,in	ITA7365 06/16/08		35.4		L5			Alpha: 8.02E-04 uCi/Sa Beta: -6.41E-04 uCi/Sa	
13 KPA64-1-AA J8F040162-2-SAMP 06/02/2008 08:00 AmtRec: VIAL20,2X4LP #Containers: 3	3868.00g,in	ITA7366 06/16/08		34.9		L2	0607	7/2/08	Alpha: 2.44E-04 uCi/Sa Beta: -3.76E-04 uCi/Sa	
14 KPA7M-1-AA J8F040165-1-SAMP 06/03/2008 12:56 AmtRec: VIAL20,2X4LP #Containers: 3	3911.50g,in	ITA7367 06/16/08		34.5		L4	0602		Alpha: 7.35E-04 uCi/Sa Beta: 5.97E-04 uCi/Sa	

TESTAMERICA

6/24/2008 1:43:38 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabBN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8164618 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 KPEV3-1-AE J8F050164-1-SAMP 06/04/2008 09:30	3863.20g,in	ITA7368 06/16/08			34.4	100	L5	0653	7/3/08	
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10 Scr: Alpha: 1.30E-03 uCi/Sa Beta: -1.04E-03 uCi/Sa										
16 KPEX6-1-AE J8F050177-1-SAMP 06/04/2008 11:17	3893.80g,in	ITA7369 06/16/08			34.7		L2	0837		
AmtRec: VIAL20,4XLP,3X4LP #Containers: 8 Scr: Alpha: -3.16E-04 uCi/Sa Beta: 4.59E-03 uCi/Sa										
17 KPVMX-1-AA-B J8F120000-618-BLK 05/20/2008 13:22	3966.80g,in	ITA7370 06/16/08			34.1		L4	0838		
AmtRec: #Containers: 1 Scr: Alpha: Beta:										
18 KPVMX-1-AC-C J8F120000-618-LCS 05/20/2008 13:22	3976.10g,in	ISD0855 04/22/08			32.1		L5	0838		
AmtRec: #Containers: 1 Scr: Alpha: Beta:										

Comments:

DH 6/24/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS, 57671

KNTWQ1AA-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KPVMX1AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KPVMX1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

KNTWQ1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TAL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 3
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 18
Prep_SamplePrep v4.8

132

TESTAMERICA

6/24/2008 1:43:39 PM

Sample Preparation/Analysis

Balance Id:1120482733

BN I-129 Prp/SepRC5025

Pipet #: _____

TB Gamma by LEPD

Sep1 DT/Tm Tech: _____

AnalyDueDate: 07/21/2008

5I CLIENT: HANFORD

Batch: 8164618

pCi/L

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: ,HarrisD



Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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KPVMX1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Rlk Subt.: N Sci.Not.: Y ODRs: B

KPVMX1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

133

7/10/2008 2:47:44 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/11/2007, 7/15/2008, Batch: '8164618', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8164618				
AC	Rev1C	HarrisD	6/24/2008 1:10:15 PM	
SC		wagarr	IsBatched	6/13/2008 8:19:38 AM
SC		HarrisD	InPrep	6/24/2008 1:10:15 PM
SC		HarrisD	Prep1C	6/24/2008 1:44:02 PM
SC		BostedD	InPrep2	6/30/2008 10:57:42 AM
SC		BostedD	Prep2C	7/2/2008 4:24:07 PM
SC		DAWKINSO	InCnt1	7/2/2008 4:28:07 PM
SC		BlackCL	CalcC	7/3/2008 9:10:33 AM
SC		antonsonl	Rev1C	7/10/2008 2:47:33 PM
AC		HarrisD	6/24/2008 1:44:02 PM	
AC		BostedD	6/30/2008 10:57:42	
AC		BostedD	7/2/2008 4:24:07 PM	
AC		DAWKINSO	7/2/2008 4:28:07 PM	
AC		BlackCL	7/3/2008 9:10:33 AM	
AC		antonsonl	7/10/2008 2:47:33 PM	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.33

TESTAMERICA

6/24/2008 4:13:22 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

CY Se-79 PrpRC5016, SepRC5043

TM Selenium-79 by Liquid Scint

SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/21/2008

W05419

Sep1 DT/Tm Tech:

Batch: 8164621 WATER pCi/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: WoodT,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KN1JT-1-AF	200.00g,in	SETA0267	04/11/08						
J8E280299-1-SAMP									
05/27/2008 09:57	AmtRec: 20ML,6XLP,3X4LP	#Containers: 10					Scr: Alpha: -1.54E-03 uCi/Sa	Beta: 2.66E-03 uCi/Sa	
2 KN1JT-1-AH-X	199.90g,in	SETA0268	04/11/08						
J8E280299-1-DUP									
05/27/2008 09:57	AmtRec: 20ML,6XLP,3X4LP	#Containers: 10					Scr: Alpha: -1.54E-03 uCi/Sa	Beta: 2.66E-03 uCi/Sa	
3 KN1JX-1-AF	199.90g,in	SETA0269	06/24/08						
J8E280299-2-SAMP									
05/27/2008 11:13	AmtRec: 20ML,6XLP,3X4LP	#Containers: 10					Scr: Alpha: 4.10E-04 uCi/Sa	Beta: -1.24E-04 uCi/Sa	
4 KPEV3-1-AF	200.30g,in	SETA0270	06/24/08						
J8F050164-1-SAMP									
06/04/2008 09:30	AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10					Scr: Alpha: 1.30E-03 uCi/Sa	Beta: -1.04E-03 uCi/Sa	
5 KPVM2-1-AA-B	200.20g,in	SETA0271	06/24/08						
J8F120000-621-BLK									
05/27/2008 09:57	AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	
6 KPVM2-1-AC-BN									
J8F120000-621-IBLK									
05/27/2008 09:57	AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	

TESTAMERICA

6/24/2008 4:13:24 PM

Sample Preparation/Analysis

Balance Id:

CY Se-79 PrpRC5016, SepRC5043

Pipet #:

TM Selenium-79 by Liquid Scint

Sep1 DT/Tm Tech:

AnalyDueDate: 07/21/2008

SI CLIENT: HANFORD

Sep2 DT/Tm Tech:

Batch: 8164621

pCi/L

Prep Tech:

SEQ Batch, Test: None



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

pH220 Att 6/24/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KN1JT1AF-SAMP Constituent List:

Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KPVM21AA-BLK:

Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KPVM21AC-IBLK:

Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KN1JT1AF-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVM21AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVM21AC-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By

Date:

TAL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 6

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8

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7/18/2008 10:29:11 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/19/2007, 7/23/2008, Batch: '8164621', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8164621				
AC	Rev1C	HarrisD	6/24/2008 4:07:27 PM	
SC		wagarr	IsBatched 6/13/2008 8:19:38 AM	ICOC_RADCALC v4.8.32
SC		HarrisD	InPrep 6/24/2008 4:07:27 PM	RL-PRP-004 REVISION 0
SC		HarrisD	Prep1C 6/24/2008 4:13:23 PM	RL-PRP-004 REVISION 0
SC		ManisD	InSep1 7/1/2008 8:04:03 AM	LSC-012 REV 0
SC		BlackCL	InCnt1 7/3/2008 9:41:25 AM	RL-CI-005 REVISION 0
SC		BlackCL	CalcC 7/8/2008 9:44:25 AM	RL-CI-005 REVISION 0
SC		nortonj	Rev1C 7/18/2008 10:29:02 AM	RICH-RC-0002 REV 8
AC		HarrisD	6/24/2008 4:13:23 PM	
AC		ManisD	7/1/2008 8:04:03 AM	
AC		BlackCL	7/3/2008 9:41:25 AM	
AC		BlackCL	7/8/2008 9:44:25 AM	
AC		nortonj	7/18/2008 10:29:02	

AC: Accepting Entry; SC: Status Change

TAL Richland
Richland Wa.

Page 1

Grp Rec Cnt: 6
ICOCFractions v4.8.33



RE-ANALYSIS REQUEST

DUE DATE 1/21/08

CUSTOMER P6W

ANALYSIS 879

MATRIX water

LOT NUMBER J8280299

SAMPLE DELIVERY GROUP _____

OLD BATCH NUMBER 8164621

NEW BATCH NUMBER 8192112

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) <u>KPEV31AF</u>		<u>CECL not met due to low yield</u>
2)		
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		
LAB QC ID		Assigned with new batch.

7/11/2008 10:46:20 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabCY Se-79 PrpRC5016, SepRC5043
TM Selenium-79 by Liquid Scint
SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8192442 WATER pCi/L PM, Quote: SS, 57671
SEQ Batch, Test: None All Tests: 8164617 AWTa, 8164618 BNTB, 8164621 CYTM, 8164622 KOXW, 8164623 7YSR, 8164624 5SS3,
8192442 CYTM,

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPEV3-2-AF J8F050164-1-SAMP 06/04/2008 09:30	200.00g,in	SETA0279 06/24/08							
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10 Scr: Alpha: 1.30E-03 uCi/Sa Beta: -1.04E-03 uCi/Sa									
2 KRCQM-1-AA-B J8G100000-442-BLK 06/04/2008 09:30	200.20g,in	SETA0280 06/24/08							
AmtRec: #Containers: 1 Scr: Alpha: Beta:									
3 KRCQM-1-AD-BN J8G100000-442-IBLK 06/04/2008 09:30									
AmtRec: #Containers: 1 Scr: Alpha: Beta:									

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS, 57671

KPEV32AF-SAMP Constituent List:

Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KRCQM1AA-BLK Constituent List:

Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KRCQM1AD-IBLK:

Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KPEV32AF-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KRCQM1AA-BLK Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KRCQM1AD-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TAL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 3
Prep_SamplePrep v4.8

TESTAMERICA

7/11/2008 10:46:21 AM

Sample Preparation/Analysis

Balance Id: _____

CY Se-79 PrpRC5016, SepRC5043

Pipet #: _____

TM Selenium-79 by Liquid Scint

Sep1 DT/Tm Tech: _____

5I CLIENT: HANFORD

AnalyDueDate: 07/21/2008

Sep2 DT/Tm Tech: _____

Batch: 8192442

pCi/L

Prep Tech: _____

SEQ Batch, Test: None



Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Approved By _____

Date: _____

140

7/18/2008 10:33:14 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/19/2007, 7/23/2008, Batch: '8192442', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8192442				
AC	Rev1C	HarrisD	7/11/2008 10:43:20	
SC		an:onsol	IsBatched	7/10/2008 3:21:39 PM
SC		HarrisD	InPrep	7/11/2008 10:43:20 AM
SC		HarrisD	Prep1C	7/11/2008 10:46:38 AM
SC		ManisD	Sep1C	7/16/2008 3:54:09 PM
SC		DAWKINSO	InCnt1	7/16/2008 4:14:59 PM
SC		DAWKINSO	CalcC	7/17/2008 9:27:23 PM
SC		nortonj	Rev1C	7/18/2008 10:33:09 AM
AC		HarrisD		
AC		ManisD		
AC		DAWKINSO		
AC		DAWKINSO		
AC		nortonj		

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt:6

ICOCFractions v4.8.33

TESTAMERICA

6/13/2008 8:10:59 AM

Sample Preparation/Analysis

Balance Id: *N/A*384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/21/2008

W05419

Sep1 DT/Tm Tech:

info 080m

Batch: 8164624 WATER

pCi/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KN1JT-1-AC								
J8E280299-1-SAMP								
05/27/2008 09:57		AmtRec: 20ML,6XLP,3X4LP	#Containers: 10			Scr: Alpha: -1.54E-03 uCi/Sa	Beta: 2.66E-03 uCi/Sa	
2 KN1JX-1-AC								
J8E280299-2-SAMP								
05/27/2008 11:13		AmtRec: 20ML,6XLP,3X4LP	#Containers: 10			Scr: Alpha: 4.10E-04 uCi/Sa	Beta: -1.24E-04 uCi/Sa	
3 KN1JX-1-AJ-X								
J8E280299-2-DUP								
05/27/2008 11:13		AmtRec: 20ML,6XLP,3X4LP	#Containers: 10			Scr: Alpha: 4.10E-04 uCi/Sa	Beta: -1.24E-04 uCi/Sa	
4 KPEV3-1-AC								
J8F050164-1-SAMP								
06/04/2008 09:30		AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10			Scr: Alpha: 1.30E-03 uCi/Sa	Beta: -1.04E-03 uCi/Sa	
5 KPVM5-1-AA-B								
J8F120000-624-BLK								
05/27/2008 11:13		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
6 KPVM5-1-AC-C								
J8F120000-624-LCS								
05/27/2008 11:13		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
7 KPVM5-1-AD-BN								
J8F120000-624-BLK								
05/27/2008 11:13		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	

TAL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.1

142

6/13/2008 8:10:59 AM

Sample Preparation/Analysis

Balance Id: *N/A*

5S C-14 Prp/SepRC5022

Pipet #:

S3 Carbon-14 by Liquid Scint

5I CLIENT: HANFORD

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech: *6.20 B. B.*Batch: 8164624
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS, 57671

KN1JTIAC-SAMP Constituent List:

C-14 RDL:2.00E+02 pCi/L LCL:70 UCL:130 RPD:20

KPVMS1AA-BLK:

KPVMS1AC-LCS:

KPVMS1AD-IBLK:

KN1JTIAC-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPVMS1AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPVMS1AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KPVMS1AD-IBLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

6/25/2008 11:06:46 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/26/2007, 6/30/2008, Batch: '8164624', User: *ALL Order By DateTimeAccepting

Batch	Work Ord	CurStatus	Accepting	Comments
8164624				
AC	Rev1C	McDowellD	6/23/2008 2:13:52 PM	
SC		wagarr	IsBatched 6/13/2008 8:19:38 AM	ICOC_RADCALC v4.8.32
SC		McDowellD	Sep1C 6/23/2008 2:13:52 PM	RL-LSC-008 REVISION 0
SC		ClarkR	InCnt1 6/23/2008 2:28:34 PM	RL-CI-005 REVISION 0
SC		ClarkR	CalcC 6/24/2008 8:26:35 AM	RL-CI-005 REVISION 0
SC		antonsoni	Rev1C 6/25/2008 11:06:38 AM	RICH-RC-0002 REV 8
AC		ClarkR	6/23/2008 2:28:34 PM	
AC		ClarkR	6/24/2008 8:26:35	
AC		antonsoni	6/25/2008 11:06:38	

C: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 4

ICOCFractions v4.8.33

TESTAMERICA

6/25/2008 9:12:50 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015

SS Total Uranium by KPA

SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8164620 WATER

ug/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HarrisD | Boek

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPEVW-1-AD	25.10g,in							
J8F050162-1-SAMP								
06/04/2008 13:19		AmtRec: VIAL20,500MLP,LP	#Containers: 3			Scr: Alpha: 2.27E-04 uCi/Sa	Beta: -4.14E-06 uCi/Sa	
2 KPEVW-1-AF-S	25.00g,in		UNSF4247					
J8F050162-1-MS			05/22/08,pd 02/01/05,r					
06/04/2008 13:19		AmtRec: VIAL20,500MLP,LP	#Containers: 3			Scr: Alpha: 2.27E-04 uCi/Sa	Beta: -4.14E-06 uCi/Sa	
3 KPEVW-1-AG-X	25.10g,in							
J8F050162-1-DUP								
06/04/2008 13:19		AmtRec: VIAL20,500MLP,LP	#Containers: 3			Scr: Alpha: 2.27E-04 uCi/Sa	Beta: -4.14E-06 uCi/Sa	
4 KPVM1-1-AA-B	25.10g,in							
J8F120000-620-BLK								
06/04/2008 13:19		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
5 KPVM1-1-AC-C	25.20g,in		UNSF4248					
J8F120000-620-LCS			05/22/08,pd 02/01/05,r					
06/04/2008 13:19		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
6 KPVM1-1-AD-C	25.20g,in		UNSC2527					
J8F120000-620-LCS			05/22/08,pd 02/02/05,r					
06/04/2008 13:19		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	

TAL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 6
Prep_SamplePrep v4.8

145

6/25/2008 9:12:51 PM

Sample Preparation/Analysis

Balance Id:1120482733

DH UNat_Laser PrpRC5015

Pipet #: _____

SS Total Uranium by KPA

SI CLIENT: HANFORD

AnalyDueDate: 07/21/2008

Sep1 DT/Tm Tech:

Batch: 8164620

ug/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HarrisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

pk2.0 Out 6/25/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS, 57671

KPEVW1AD-SAMP Constituent List:

Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:

KPEVW1AF-MS Constituent List:

KPVW11AA-BLK:

Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:

KPVW11AC-LCS:

Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

KPVW11AD-LCS:

Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

KPEVW1AD-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPEVW1AF-MS Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVW11AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVW11AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPVW11AD-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

7/16/2008 12:56:32 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/17/2007, 7/21/2008, Batch: '8164620', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8164620				
AC	Rev1C	HarrisD	6/25/2008 9:09:57 PM	
SC		wagarr	IsBatched 6/13/2008 8:19:38 AM	ICOC_RADCALC v4.8.32
SC		HarrisD	InPrep 6/25/2008 9:09:57 PM	RL-PRP-004 REVISION 0
SC		BockJ	InPrep2 7/10/2008 7:57:41 AM	RL-KPA-001 REVISION 0
SC		BockJ	Prep2C 7/15/2008 10:40:58 AM	RL-KPA-001 REVISION 0
SC		NelsonT	Cnt1C 7/15/2008 3:28:38 PM	RL-KPA-003 REVISION 0
SC		nortonj	Rev1C 7/16/2008 12:56:28 PM	RICH-RC-0002 REV 8
AC		BockJ	7/10/2008 7:57:41	
AC		BockJ	7/15/2008 10:40:58	
AC		NelsonT	7/15/2008 3:28:38 PM	
AC		NelsonT	7/15/2008 3:46:04 PM	
AC		nortonj	7/16/2008 12:56:28	

AC: Accepting Entry; SC: Status Change

TAL Richland
Richland Wa.

Page 1

Grp Rec Cnt: 6
ICOCFractions v4.8.33

TESTAMERICA

5/30/2008 11:49:40 AM

Sample Preparation/Analysis

Balance Id:

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)

Pipet #:

AnalyDueDate: 07/14/2008

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 8151262 WATER mg/L
SEQ Batch, Test: None All Tests: 8151262 88EA,

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KN3T7-1-AA								
J8E290299-1-SAMP								
05/29/2008 13:14		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
2 KN3T7-1-AC-S								
J8E290299-1-MS								
05/29/2008 13:14		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
3 KN3T7-1-AD-D								
J8E290299-1-MSD								
05/29/2008 13:14		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
4 KN3T7-1-AE-X								
J8E290299-1-DUP								
05/29/2008 13:14		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
5 KN49G-1-AA-B								
J8E300000-262-BLK								
05/29/2008 13:14		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 KN49G-1-AC-C								
J8E300000-262-LCS								
05/29/2008 13:14		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

TESTAMERICA

5/30/2008 11:49:41 AM

Sample Preparation/Analysis

Balance Id:

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/14/2008

Sep1 DT/Tm Tech:

Batch: 8151262
SEQ Batch, Test: None

mg/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KN3T71AA-SAMP Constituent List:

KN3T71AC-MS Constituent List:

KN3T71AD-MSD:

KN49G1AA-BLK:

KN49G1AC-LCS:

KN3T71AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KN3T71AC-MS Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KN3T71AD-MSD:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KN49G1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KN49G1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By

Date:

TAL Richland Key In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 6

Richland Wa. pd - Prep Dt. r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ICOC v4.8.:

6/2/2008 3:51:52 PM

Sample Preparation/Analysis

Balance Id:

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)

Pipet #:

AnalyDueDate: 07/17/2008

51 CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 8154426 WATER mg/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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1 KN78H-1-AA

J8F020174-1-SAMP

06/02/2008 09:19

AmtRec: VIAL20,500G

#Containers: 2

Scr:

Alpha:

Beta:

2 KN78H-1-AC-S

J8F020174-1-MS

06/02/2008 09:19

AmtRec: VIAL20,500G

#Containers: 2

Scr:

Alpha:

Beta:

3 KN78H-1-AD-D

J8F020174-1-MSD

06/02/2008 09:19

AmtRec: VIAL20,500G

#Containers: 2

Scr:

Alpha:

Beta:

4 KN78H-1-AE-X

J8F020174-1-DUP

06/02/2008 09:19

AmtRec: VIAL20,500G

#Containers: 2

Scr:

Alpha:

Beta:

5 KN8D1-1-AA-B

J8F020000-426-BLK

06/02/2008 09:19

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

6 KN8D1-1-AC-C

J8F020000-426-LCS

06/02/2008 09:19

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

TESTAMERICA

6/2/2008 3:51:53 PM

Sample Preparation/Analysis

Balance Id:

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/17/2008

Sep1 DT/Tm Tech:

Batch: 8154426
SEQ Batch, Test: None

mg/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KN78H1AA-SAMP Constituent List:

KN78H1AC-MS Constituent List:

KN78H1AD-MSD:

KN8D11AA-BLK:

KN8D11AC-LCS:

KN78H1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KN78H1AC-MS Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KN78H1AD-MSD:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KN8D11AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KN8D11AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By

Date:

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TESTAMERICA

6/3/2008 5:15:05 PM

Sample Preparation/Analysis

Balance Id:

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)

Pipet #:

AnalyDueDate: 07/18/2008

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 8155503 WATER mg/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPAJ7-1-AA								
J8F030292-1-SAMP								
06/03/2008 08:40		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
2 KPAJ7-1-AC-S								
J8F030292-1-MS								
06/03/2008 08:40		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
3 KPAJ7-1-AD-D								
J8F030292-1-MSD								
06/03/2008 08:40		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
4 KPAJ7-1-AE-X								
J8F030292-1-DUP								
06/03/2008 08:40		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
5 KPAJ9-1-AA KPCSIAA								
J8F030292-2-SAMP J8F040186 SKS 7/8/08								
06/03/2008 12:40		AmtRec: VIAL20,500G	#Containers: 2			Scr:	Alpha:	Beta:
6 KPAKX-1-AA-B								
J8F030000-503-BLK								
06/03/2008 08:40		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 KPAKX-1-AC-C								
J8F030000-503-LCS								
06/03/2008 08:40		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

TAL Richland
Richland Wa.Key: In Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.

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TESTAMERICA

6/3/2008 5:15:05 PM

Sample Preparation/Analysis

Balance Id:

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/18/2008

Sep1 DT/Tm Tech:

Batch: 8155503
SEQ Batch, Test: None

mg/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPAJ71AA-SAMP Constituent List:

KPAJ71AC-MS Constituent List:

KPAJ71AD-MSD:

KPAKX1AA-BLK:

KPAKX1AC-LCS:

KPAJ71AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPAJ71AC-MS Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPAJ71AD-MSD:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPAKX1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KPAKX1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By

Date: _____

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